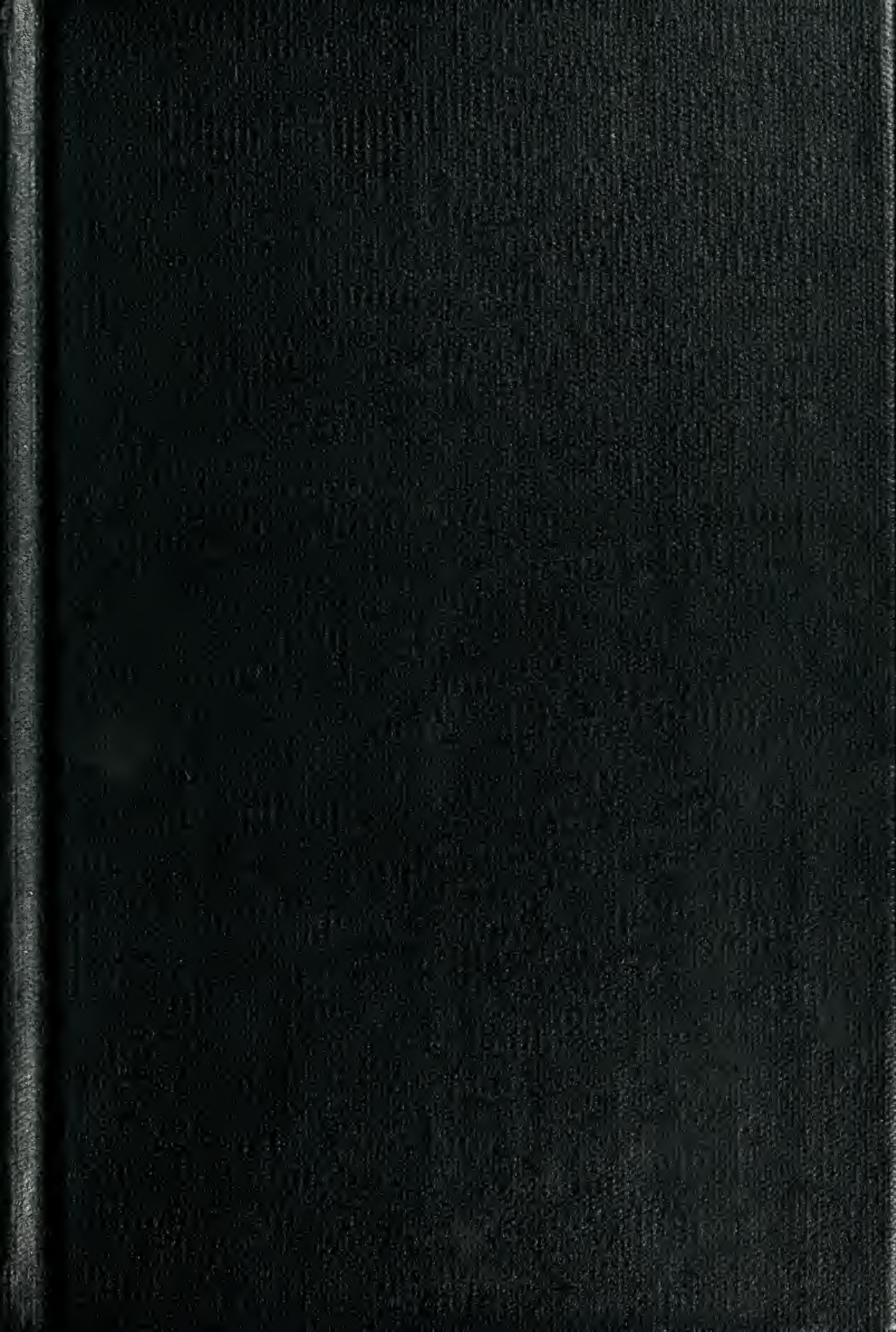




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CATALOG ISSUE

**THE
AMERICAN
UNIVERSITY
BULLETIN**

1967

1968

WASHINGTON, D.C.

**THE AMERICAN UNIVERSITY BULLETIN
1967-1968 CATALOG ISSUE**

REGULATIONS SUBJECT TO CHANGE

Because of the nature of the educational process, the admission requirements, courses and degrees available, degree and graduation requirements, charges, costs and other information contained in this Bulletin are subject to change without notice by the University and are to be considered as informational only and not binding in any way on the University. Each step of the educational process from admission through graduation requires approval by appropriate University officials. The University reserves the right to change any requirement, to deny admission, and after a student is admitted to require a student to withdraw or to refuse to grant a degree if a student does not satisfy the University in its sole judgment that he has satisfactorily met its degree requirements.

THE AMERICAN UNIVERSITY BULLETIN 1967 1968

Volume 44, Number 1, October 1967

Information as of July 1, 1967



1967-1968

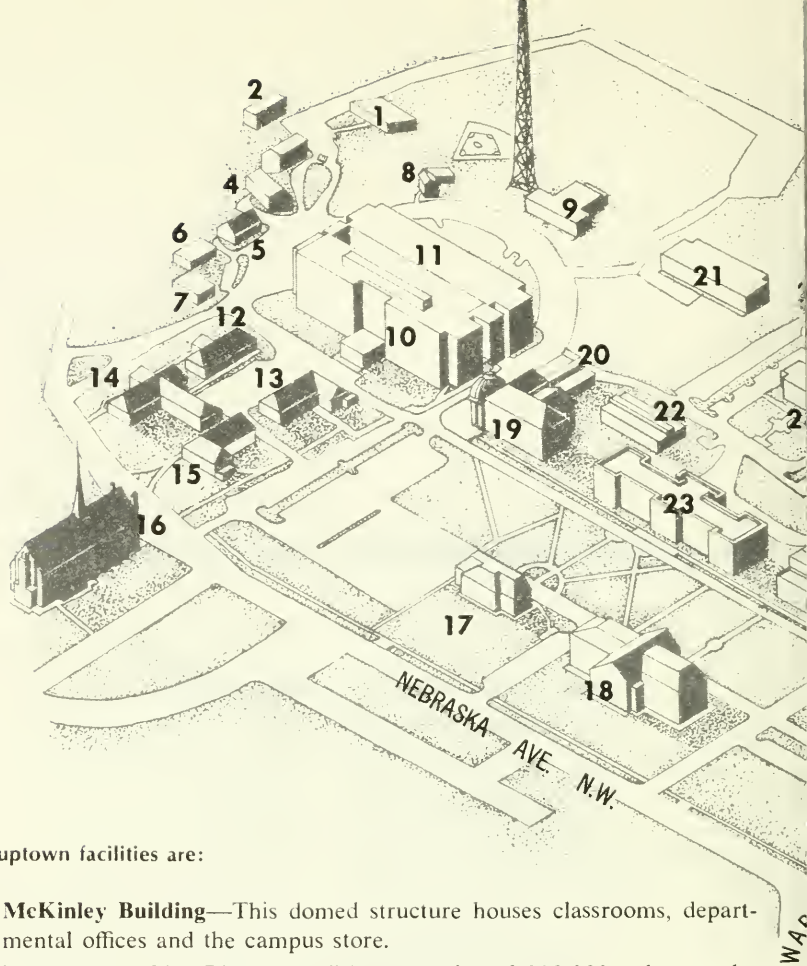
ACADEMIC CALENDAR

<i>September 20</i>	Fall Session classes begin
<i>November 23-26</i>	Thanksgiving holidays
<i>December 20-January 3</i>	Christmas holidays
<i>January 19</i>	Final examinations begin
<i>January 27</i>	End of fall session
<i>February 7</i>	Spring session classes begin
<i>February 22</i>	Washington's Birthday, holiday
<i>February 24</i>	Founder's Day
<i>April 10-16</i>	Spring vacation
<i>May 30</i>	Memorial Day, holiday
<i>June 9</i>	Fifty-fourth annual Commencement
<i>June 20</i>	Summer session classes begin
<i>August 30</i>	Summer session classes end
<i>September 18</i>	Fall session classes begin (1968-1969)

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Some of the uptown facilities are:

McKinley Building—This domed structure houses classrooms, departmental offices and the campus store.

Battelle-Tompkins Library—With a capacity of 300,000 volumes, the library includes a faculty-graduate reading room, 24-hour study room, typing, Xerox and rare book rooms and a periodical reading room.

Hurst Hall—The oldest building on campus is used for classrooms and science laboratories. Glover Room, the scene of many campus activities, is located here.

Watkins Art Building—The first wing of the proposed Creative Arts Center houses studios, lecture rooms and the Watkins Art Gallery.

Communications Building—Home of the campus radio station also has studios for classes in broadcasting and television.

Mary Graydon Center—The social hub of the campus houses student offices, lounges, recreational facilities and the cafeteria and snack bar.

Asbury Administration Building—Admissions office and other administrative offices are located here.

Letts-Anderson Hall—Women's Dormitory.

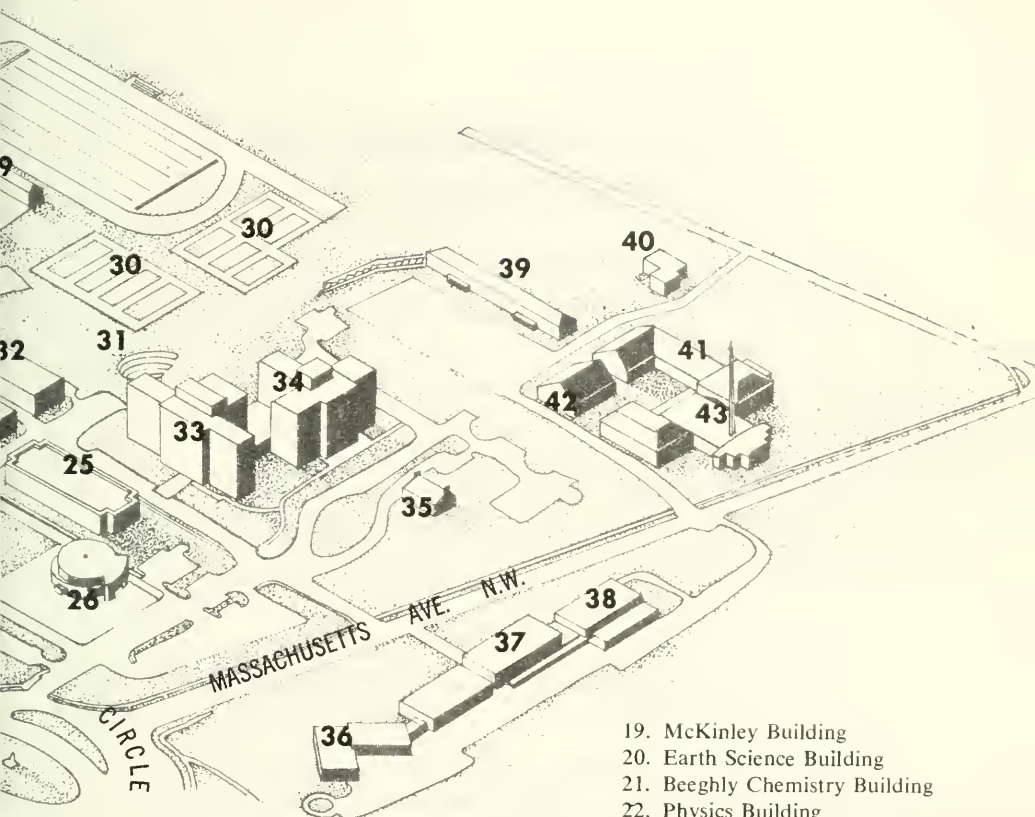
Hughes-McDowell Hall—Men's Dormitory.

Leonard Center—Men's Gymnasium, bowling lanes, swimming pool, billiard room, and mail room are located here.

Clendenen—Home of the campus theatre and women's physical education department.

THE AMERICAN UNIVERSITY

Uptown Campus



LEGEND

- | | |
|-------------------------------------|---|
| 1. Watkins Art Building | 19. McKinley Building |
| 2. Kreeger Music Building | 20. Earth Science Building |
| 4. Hamilton Building | 21. Beeghly Chemistry Building |
| 5. ΦΣΚ | 22. Physics Building |
| 6. ΑΣΦ | 23. Mary Graydon Center |
| 7. ΦΕΠ | 24. Battelle-Tompkins Library |
| 8. ΑΤΟ | 25. John Sherman Myers Law Building |
| 9. Communications Building | Hutchins Building (Rear Entrance) |
| 10. Letts Hall | 26. Kay Spiritual Life Center |
| 11. Anderson Hall | 27. Green House |
| 12. McCabe Hall | 28. Asbury Administration Building |
| 13. Clark Hall | 29. Osborn Building |
| 14. Gray Hall | 30. Tennis Courts |
| 15. Roper Hall | 31. Woods Brown Outdoor Theatre |
| 16. Metropolitan Memorial Church | 32. Clendenen Gymnasium |
| 17. School of International Service | 33. Hughes Hall |
| 18. Hurst Hall | 34. McDowell Hall |
| | 35. President's Administration Building |
| | 36. Leonard Annex |
| | 37. Leonard Gymnasium |
| | 38. Leonard Swimming Pool |
| | 39. Dormitory—Seminary |
| | 40. President's House—Seminary |
| | 41. Classroom Building—Seminary |
| | 42. Library—Seminary |
| | 43. Administration Building—Seminary |

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University Relations

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Admission Director, Office of Admissions, Asbury Building

Housing Resident Halls Business Management Office, McDowell Hall

Scholarships and Loans Director, Office of Student Aid, Mary Graydon Center

Part-time Employment Director, Placement Center, Mary Graydon Center

Counseling Director, Counseling and Testing Center, Mary Graydon Center

Program Information Office of the Dean of the Respective College

Records and Transcripts Registrar, Asbury Building

Foreign Student Adviser Foreign Student Adviser, Mary Graydon Center

Financial Transactions Office of Student Accounts, Leonard Center

To complete above

addresses, write: The American University,
Massachusetts and Nebraska Avenues, N.W.
Washington, D.C. 20016

For additional information, phone, write, or visit:

Office of the Director of Admissions

THE AMERICAN UNIVERSITY

Massachusetts and Nebraska Avenues, N.W.

Washington, D.C. 20016 Telephone: (202) 244-6800

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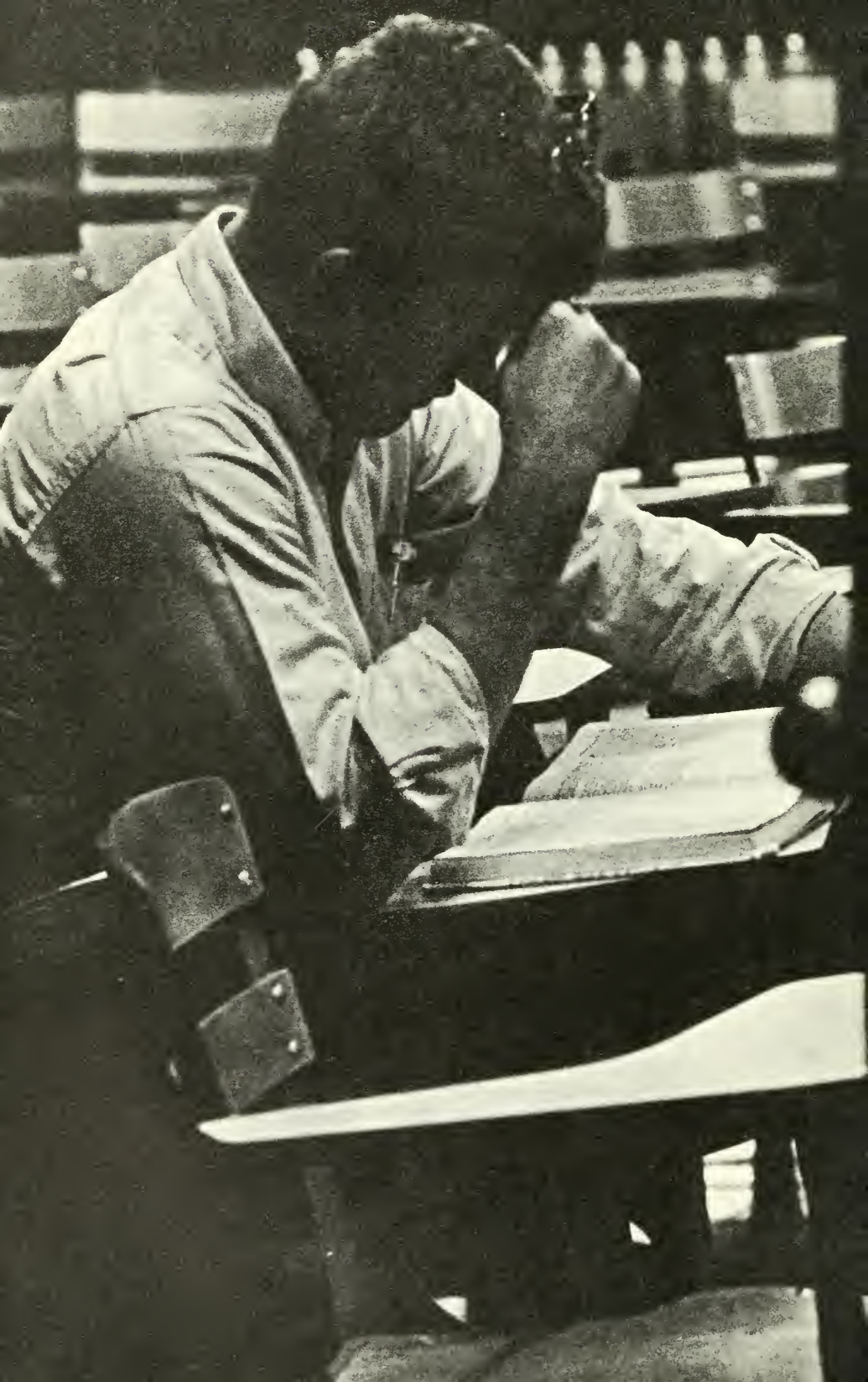
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* Alumnus of The American University

** Elected by the Alumni Association



THE UNIVERSITY

HISTORY AND ORGANIZATION

History THE AMERICAN UNIVERSITY was founded by Methodist Bishop John Fletcher Hurst and chartered by Congress in 1893. Bishop Hurst chose the nation's capital as the setting for a new Protestant institution devoted specifically to graduate study and personally selected the 75-acre tract in northwest Washington. The University was officially dedicated in 1914, and in 1916 the first degrees were awarded.

In 1925 the need for undergraduate liberal arts education was recognized with the establishment of the College of Liberal Arts now the College of Arts and Sciences. Other schools added to the University, in chronological order, are: Washington College of Law, 1949; School of Business Administration, 1955; School of Government and Public Administration, 1957; School of International Service, 1958; College of Continuing Education, 1964 and Lucy Webb Hayes School of Nursing, 1965. The Washington College of Law publishes a separate catalog.

The University has retained its close relationship to The Methodist Church and is known today as a "national Methodist university." In 1956 a portion of the University campus was deeded to Wesley Theological Seminary. The addition of a School of Nursing was the outgrowth of the bond between the University and nearby Sibley Memorial Hospital, another Methodist-related institution. The National Methodist Church, Metropolitan Memorial, is located across Nebraska Avenue from the campus and is the scene of many University functions.

Enrollment The student body of the University normally is composed of students from all 50 states and approximately 80 foreign countries. In the 1966-67 academic year, full-time undergraduates numbered 4,341. A total of 2,852 enrolled for full-time and part-time graduate study and approximately 7,000 students attended on a part-time basis either on the campus or at various metropolitan Washington off-campus locations.

Accreditation The American University is accredited by the Middle States Association of Colleges and Secondary Schools and the University Senate

of The Methodist Church. It is a member of the Association of American Colleges, the Association of Urban Universities, the Association of University Evening Colleges, the National Intercollegiate Athletic Association, and is approved by the American Association of University Women. A charter member of the Council of Graduate Schools in the United States, the University is also a member of the Midwest Conference on Graduate Study and Research.

The School of Business Administration is a member of the Middle Atlantic Association of Colleges of Business Administration. The Washington College of Law is a member of the Association of American Law Schools and is approved by the American Bar Association. The Department of Education in the College of Arts and Sciences is a member of the American Association of Colleges for Teacher Education. The Department of Music in the College of Arts and Sciences is an associate member of the National Association of Schools of Music. The Department of Chemistry, College of Arts and Sciences, is accredited by The American Chemical Society. Wesley Theological Seminary is accredited by the American Association of Theological Schools and the University Senate of The Methodist Church.

CULTURAL OPPORTUNITIES

Location Students at The American University have a unique opportunity to enrich their educational experience because the University is located in the nation's capital. The Library of Congress, the National Archives, and some 250 special libraries are found here. Some of these, such as the Folger Shakespeare Library, are world famous. To the scientist, the National Bureau of Standards, the National Institutes of Health and the Geological Survey are of special interest. The embassies and consulates contribute a rare source of information and experience to the student. Museums and art galleries, the theater, concerts and religious centers enhance the humanities program. Learned societies, governmental agencies, business associations, and professional groups whose headquarters are in the metropolitan area offer still another reward to the student who comes to Washington.

University Facilities The uptown campus of The American University is located in northwest Washington at Ward Circle just beyond Embassy Row. Most of the University facilities are on the 65-acre uptown campus but there is also a downtown center at 1901 F Street, near the White House. Some of the uptown facilities are:

THE LIBRARY. Surely Washington, D.C., may fairly be considered the bibliographic center of the world. Dominated by the Library of Congress, the two-hundred-fifty-odd libraries in the city give unparalleled support to the Consortium of the five local universities. Although the smallest of the five, the Library of American University is nonetheless the fastest growing: its collection will have doubled in three years to reach 300,000 cataloged volumes by 1969, and it will shortly reach an annual growth rate of 50,000 items. Some two thousand periodicals are currently received. The high caliber of the collection is all the more

remarkable because of the present small size of the University Library: included are the Peace Society Library, excellent in pre- and post-World War I materials, including those from the League of Nations; the Artemas Martin collection of rare materials on mathematics, many items unique; the Friedrich (economics) and the Franklin (pre- and post-Hitler Germany) collections; finally, a small but fine group of European diplomatic papers. The University Library's main catalog includes the holdings of the Wesley Theological Seminary Library and of the Washington College of Law Library. The resources of the Consortium Libraries are regularly used by participating students. Students are directed as required to the many specialized libraries freely available in the area.

ABRAHAM S. KAY SPIRITUAL LIFE CENTER. This unusual circular edifice is the University's center of interfaith religious activity. In addition to an auditorium, the Kay Center contains offices for chaplains of various denominations.

CREATIVE ARTS CENTER. The Watkins Art Building opened in 1962 as the first wing of the Arts Center and houses studios, lecture rooms and graphic arts workshop. The Kreeger Music Building contains teaching studios, classrooms, practice rooms, faculty offices and a recital hall. The final unit of the Center ultimately will house the Speech Arts Department and new theater to replace the University's present Clendenen Theater which, together with the Woods-Brown Amphitheatre, provide indoor and outdoor stages for campus productions and convocations.

COMMUNICATIONS BUILDING. This is the home of campus radio stations WAMU and WAMU-FM and contains studios for classes in broadcasting and television. The AM station is heard only on campus but WAMU-FM reaches an audience within a 50-mile radius of Washington. Television programs can be taped in the TV studio for transmission over Washington channels.

MARY GRAYDON CENTER. Long a campus landmark, this recently remodeled building is the social hub of the campus as well as the seat of student government. Student Association offices and student publications occupy more than half of one floor. Here also are lounges, reading rooms, recreational facilities for commuting students, the cafeteria, snack bar and private dining rooms which are available for use by student organizations and the faculty.

LEONARD STUDENT CENTER. Most of the University's recreational facilities, which are available to all full-time students, are housed in Leonard Student Center. Here students may enjoy billiards, bowling, sauna baths, swimming and use of the gymnasium. The outdoor recreational facilities include tennis courts.

SERVICES

Counseling Programs The University Counseling and Testing Center provides professional service to guide students in choosing vocational and educational objectives and in overcoming study problems and problems of personal and social adjustment. A full range of testing services is provided together with an occupational library and a developmental reading service.

Under the direction of the Associate Dean of the College of Arts and Sciences, freshman students are assigned in small numbers to faculty members for guidance in their academic programs. They remain with these advisers until they have decided upon a major area of study at which time they are assigned to advisers in their specialized fields.

Counseling programs are also administered by the Dean of Students and the Deans of Men and Women who, through an assigned staff of Resident Advisers in the dormitories, direct social and cultural activities and assist students in their adjustment to college life.

The Chaplains are all available for counseling concerning religious, moral, or other personal problems. The University Chaplain is a specialist in personal and marriage counseling.

Placement Center The Placement Center provides assistance to students in career placement and assists students in obtaining part-time and summer employment. Whenever possible, part-time positions are arranged to provide the student with practical experience which will be useful in developing career plans.

Foreign Student Program Each year the University enrolls approximately six hundred foreign nationals in its academic programs. These students are assured a successful and well integrated experience through the guidance of the Foreign Student Adviser who is responsible for their general welfare and counseling. He represents the students in all matters relating to University policy, assists in personal adjustment problems, United States Immigration requirements, passport and visa extensions, and community relationships.

Residence Facilities Dormitories for men and women are located on the campus and at nearby Sibley Memorial Hospital. A limited number of double rooms are available for full-time graduate students. There are no accommodations for married couples. Women students are housed on the campus in Letts Hall and the new Anderson Hall; at Sibley Hospital they occupy Hayes Hall. Men students reside in McDowell Hall and Hughes Hall on the campus. Room rates vary with the type and location of the accommodations. A complete list can be found in the *Schedule of Classes Bulletin*.

Applications for dormitory rooms should be addressed to the Manager, Residence Halls Business Management and must be accompanied by a room deposit fee of \$100. The deposit will be held over from semester to semester as long as the student continues to reside in University housing. Upon application after graduation, or approved withdrawal from University housing, the \$100 will be refunded, less any unpaid obligations, provided the student has fulfilled all room contracts made by him during his attendance at the University.

Students in residence in dormitories must observe all University regulations and will be held responsible for any damage done to rooms during their period of occupancy. The cost of repairs for unnecessary damage to community property may be assessed on a pro-rated basis to all residents of a dormitory in cases where there is obvious internal responsibility not assumed by an individual.

Each room in University dormitories is equipped with a bed, chest-desk, and chair, and there is ample closet space. Electrical equipment brought by the students must be limited to small appliances such as clocks and radios.

In each dormitory there are coin-operated washers and dryers for the convenience of students. Maids clean all rooms once a week, and students are expected to maintain their own rooms at other times. There are no housekeeping facilities in the residence halls, and cooking is not permitted.

Students who cannot be assigned to University dormitories because of limited space may make their own arrangements for housing in the vicinity of the University if their parents approve.

Worship Services Each week during Fall and Spring Semester [except academic holidays] worship services are held at the Kay Spiritual Life Center on the following schedule:

Sunday: Episcopal Communion [9:00 a.m.], Roman Catholic Mass [9:45 a.m. and 12:30 p.m.], and Protestant Worship [11:00 a.m.].

Thursday: Christian Science [time and place to be announced].

Friday: Jewish Sabbath Services [7:00 p.m.].

In addition, Roman Catholic Mass is celebrated daily at 12:15 and confessions are heard daily 11:30-12:00 and Thursdays 4:00-5:00 p.m.

Food Service The University operates a cafeteria and snack bar for student dining. Optional meal contracts are available for breakfast, lunch and dinner in the cafeteria on a five-day or seven-day per week basis.

Health Services The Student Health Service is available to all full-time undergraduate students. This service is for diagnostic purposes and the care of minor illnesses only; the infirmary has no facilities for bed patients. Students whose health problems are more complex will be referred to nearby Sibley Memorial Hospital or another hospital of their choice for treatment.

Full-time undergraduate students must submit with their application for admission a report (on a form available from the Admissions Office) of the results of a physical examination by a physician.

Student Insurance Plan All full-time students may elect to participate in the Student Accident and Sickness Insurance Plan at the time of registration. Detailed information concerning this plan is available in the Office of Student Personnel.

Mail Service The University maintains a U.S. Post Office contract station on the campus where students may rent boxes for a small fee. Mail boxes are furnished resident students in each dormitory without charge.

of Student Accounts Following admission to the University, students handle all financial transactions with the University, including the cashing of checks, through the Office of Student Accounts.

Linen Rental A linen rental service is available for \$30 per year. Arrangements for this service can be made when students arrive at the University.

Campus Store The Campus Bookstore carries all required textbooks, a large selection of non-required books, all necessary paper supplies and stationery, college sportswear, college jewelry and gifts, phonograph records, magazines and newspapers, film and toiletry items.

STUDENT ACTIVITIES

Student Government The Student Association, an organization of all full-time undergraduates enrolled in all of the schools and colleges of the University, coordinates functions of campus groups and social life. The legislative and policy-forming functions of the Student Association are performed by the Student Senate. This group is composed of officers and representatives elected by the student body.

Dramatics The American University Players present several classic and contemporary productions throughout the year and also schedule play readings, one-act plays, and dramatic television productions. Through work in various phases of campus theatre, points may be acquired to meet the requirements of active membership in the Green Room Players Club.

Music Musical groups on campus include The American University Chorale, The American University Orchestra, and The American University Singers. Each of these groups presents concerts during the year. The Singers schedule concert tours in addition to their campus programs. Qualified students may register in any of these musical organizations for one credit hour per semester.

Religious Organizations Organized religious groups at the University are: the Baptist Student Union, the Canterbury Association, the Christian Science Organization, the Fellowship of Young Churchmen, Hillel, the Lutheran Student Association, the Methodist Student Movement, the Newman Association, the Unitarian-Universalists Group, and the Westminster Fellowship.

Professional and Honorary Societies One of the most satisfying achievements for any student is to be recognized by election to an honorary or professional society. At The American University students can strive for such recognition in the fields of biology, debate, dramatics, education, German language, graduate work, history, journalism, leadership, marketing, mathematics, music, political science, psychology, real estate, social science, speech arts, and transportation. Honoraries for campus leadership are Omicron Delta Kappa (men), Cap and Gown (women) and Tassels (women). There is also a chapter of the National University Honor Society, Phi Kappa Phi, on campus.

Service Organizations There are two service organizations whose University chapters are nationally affiliated. Alpha Phi Omega, for college men, provides a wide fellowship program with many leadership and service opportunities. The women's service sorority, Gamma Sigma Sigma, performs a variety of services for the University and community, including assistance in the Settlement Houses in the Washington area.

Publications Students publish a semi-weekly newspaper, the *Eagle*; a literary-humor magazine, *The American*; and a yearbook, the *Talon*. The student radio stations WAMU-AM and WAMU-FM broadcast daily.

Social Organizations The University currently has chapters of twelve nationally affiliated sororities and fraternities. The six sororities on campus are: Alpha Chi Omega, Alpha Epsilon Phi, Delta Gamma, Kappa Delta, Phi Mu, and Phi Sigma Sigma. The six campus fraternities include: Alpha Tau Omega, Alpha Sigma Phi, Phi Epsilon Pi, Phi Sigma Kappa, Tau Epsilon Phi, and Zeta Beta Tau. The governing councils of Greek life are the Panhellenic Council for the sororities, and the Inter-Fraternity Council for the fraternities.

Athletic Program The University participates in an intercollegiate athletic program that includes soccer, cross country, wrestling, basketball, swimming, tennis, golf, baseball, crew and track. There is intramural competition in touch football, basketball, softball, track, swimming, bowling, and volley ball. In addition, individual competition is available in tennis, checkers, golf, horseshoes, chess, badminton, table tennis, free throw shooting and archery.

SUMMER SESSION

The summer term includes two five-week day sessions and eight or ten-week evening sessions, depending on the courses offered.

Sessions are open to students of The American University, non-degree students (see page 399) and to students in good standing at other institutions who wish transfer credit.

A student who wishes transfer credit should bring or have mailed a letter from his dean stating that he is in good academic standing and has permission to enroll at The American University. Such students register as non-degree students.

FEES

Average expenses for a full-time undergraduate for a year (1967-1968)

are:	Tuition	\$1,680
	Students Activities Fee	34
	Room	430 to 480
	Board	390 to 500
	Total	\$2,534 to 2,694

Graduate Students \$56 a credit hour

Part-time Students \$56 a credit hour

Charges for room and board vary according to room occupancy and number of meals per week. Expenses do not include clothing, books, travel, entertainment and personal expenses. These vary according to the needs of the individual. Incidental expenses and special fees are itemized in each session *Schedule of Classes Bulletin*. Full-time non-degree students pay the same tuition rate as full-time undergraduates. Payment of fees is due at the time of registration. A deferred payment plan is available.

Refunds Pro-rated refunds of tuition will be allowed during the first six weeks of each fall and spring semesters and only if the student processes an official withdrawal available from the Offices of the Registrar or academic Deans. Requests for pro-rated refunds of meal tickets must be made separately through the Office of Student Personnel. Refund schedules are published in each session *Schedule of Classes Bulletin*.

FINANCIAL AID

More than 2,000 students are currently receiving financial aid. This aid is available in many forms—scholarships, fellowships, assistantships, remission of tuition, student loans and salaries and wages for those who have part-time employment.

Scholarships, Fellowships and Assistantships Students needing financial assistance should write to or consult with the Director of Student Aid for specific information. Special brochures related to financial assistance are available.

The University offers more than 50 undergraduate scholarships each year ranging in value from \$200 to \$1,400. In order to qualify a student must have a "B" average, rank in the top quarter of his class, have above-average College Entrance Examination Board scores and present evidence of financial need. Applicants for scholarships must also file a *Parent's Confidential Statement* with the College Scholarship Service, Box 176, Princeton, New Jersey. Forms are available at local high schools or upon request to The College Scholarship Service. Applicants for scholarships should submit to the Director of Admissions

1) a formal application; 2) an autobiographical sketch including basis for need; and 3) two letters of recommendation.

A limited number of University-wide awards are available for graduate study. Supplementing these are specialized Assistantships and Fellowships restricted to a specific college or school of the University.

Loans There are various University loans ranging from small short-term emergency loans carrying no interest to long-term loans with interest. Application for these loans may be made after one semester. National Defense Education Act Loans are available to students beginning with their first semester.

Employment Many students also earn a portion of their college expenses through part-time employment on the campus or elsewhere in the Washington community. Inquiries about employment should be addressed to the Director of Placement.

UNIVERSITY REGULATIONS

Student Responsibility The University faculty has formally adopted the following statement on student responsibility:

The American University expects that each student, as a mature member of the academic community, will adhere to the highest standards of personal integrity and good taste in his conduct and in his relationships with others.

The maintenance of such standards is a condition of continued enrollment as a student of the University, and any individual whose attitude or behavior suggests that he is not constructively committed to them may be dismissed from the University even though his record may be otherwise satisfactory.

University Liability Faculty, students, staff and guests are responsible for their personal property, clothing and possessions. The University does not carry any insurance to cover losses of such articles nor does it assume any responsibility whatever therefor.

Registration Registration is conducted on the campus on the dates specified on the academic calendar published in the *Schedule of Classes Bulletin*. In order to register for courses a student must:

1) be admitted to the University or be approved for enrollment for non-degree study;

- 2) have an American University permanent I.D. card or, in the case of new students, have a Social Security number;
- 3) secure approval of his program of study from his academic adviser;
- 4) complete the necessary registration forms and pay his tuition and fees, and
- 5) turn in all registration forms to registrar representatives.

More detailed information about registration will be found in the *Schedule of Classes Bulletin*.

Late Registration Late registration (subject to a \$10 fee) is permitted during the period provided on the academic calendar. No student will be allowed to register for credit after these dates.

Academic Load A full-time undergraduate student may register for 12 to 18 credit hours during the fall or spring sessions. Programs in excess of 18 credit hours must be approved by the appropriate Dean prior to registration. Any student employed more than 20 hours a week must register as a part-time student and may enroll for no more than 10 undergraduate credit hours per semester or for no more than 6 graduate credit hours per semester.

Information regarding the academic load regulations during the summer session can be found in the summer *Schedule of Classes Bulletin*.

Auditors A student who wishes to attend a class but who does not wish to participate, take examinations, receive a final grade, or receive credit for the course may register as an auditor. Tuition and fees for auditors are the same as those for credit students.

Changes in Registration Requests for changes in registration must be made on the form provided for this purpose by the Office of the Registrar. More than one change may be made on one form. The form must be approved by the student's adviser, then approved by the Dean of the student's school or college and filed in the Registrar's office within 48 hours. Changes in registration include withdrawals from courses, adding or dropping courses, changing sections, and changing from credit to audit status, or vice versa.

Withdrawal A student who is withdrawing completely from the University must secure the signature of his Dean on the "Course Withdrawal" form and then file this form in the Office of the Registrar on the date the withdrawal is to become effective. Students who cease to attend classes but do not file an official withdrawal with the Office of the Registrar will be given a final grade of "F." Discontinuation of attendance at class or notification to the instructor does not constitute an official withdrawal.

Refunds or cancellations of tuition are pro-rated and are calculated from the date the "Course Withdrawal" form is filed in the Office of the Registrar and in the Office of Student Accounts. Requests for cancellation of room charges and meal tickets must be processed through the Residence Halls Business Management Office and will be subject to standard University regulations.

Students who discontinue class attendance but who do not officially withdraw during the cancellation period will be responsible for payment of the full amount of the applicable tuition and fees.

Non-Degree Students If a student does not wish to pursue a degree program but desires to register for particular courses for which he has the necessary qualifications, he may be admitted to the College of Continuing Education as a non-degree student. He receives full academic credit for courses taken (unless he registers as an auditor, in which case he is not responsible for attendance or examinations and does not receive a grade or academic credit).

A non-degree student who establishes his eligibility for admission to full standing may use a limited number of credits earned as a non-degree student to meet the requirements for a degree at The American University if they are in courses appropriate to the degree sought. Non-degree students seeking admission as undergraduate degree students may do so for the fall session only and must submit the formal application for degree admission prior to August 1.

For additional information refer to the College of Continuing Education section of this *Catalog*.

Veterans' Information All students who plan to attend The American University under the provisions of a veterans' education program must submit an application to the Veterans' Administration well in advance of their registration date. The proper authorization must then be presented at the time of registration. Veterans receiving education benefits should be prepared to pay all expenses inasmuch as tuition payments are made directly to the veterans by the Veterans' Administration. Veterans who are unable to pay tuition in full at the time of registration may secure a partial deferment. (For more detailed information about the deferred payment plan consult the *Schedule of Classes Bulletin*). All veterans are advised to anticipate a delay of approximately two months before receiving their first payment. Veterans are provided guidance by the Veterans' Counselor in the Office of Student Accounts.

Foreign Students Foreign students, whether applying for admission as degree or as non-degree students, must have official transcripts sent directly from all secondary schools and/or colleges attended and must also provide evidence that they are able to use the English language with sufficient facility to pursue academic work successfully in an English-speaking institution. The University may also require that they take additional tests to establish their eligibility for the academic programs and courses in which they wish to enroll. Foreign students should be certain that they have adequate funds before they come to the United States for study.

United States Department of Justice Immigration and Naturalization Service regulations governing non-immigrant "F-1" visa foreign students require foreign students in this category to pursue a full course of study while maintaining non-immigrant student status.

In compliance with the provisions under which this institution has been classified as a training agency for foreign students, The American University requires all non-immigrant "F-1" students to pursue a full course of study each semester during the period of their enrollment.

Under this regulation an undergraduate will be required to register for 12 credit hours of course work and a graduate student will be required to register for 9 credit hours of course work. Any modification

of this requirement which results in a course load below these minimum requirements must be authorized by the Foreign Student Adviser in consultation with the Admissions Officer and the academic adviser.

Students who fail to observe the above requirements will be ineligible to receive a "Certificate of Eligibility" (Form I-20) and all other letters of certification in support of their continuation in non-immigrant "F-1" student status.

All foreign students are required to register in the Office of the Foreign Student Adviser at the beginning of each semester in order to insure their compliance with these requirements.

Questions concerning U.S. Immigration and Naturalization Service regulations should be directed to the Foreign Student Adviser.

Motor Vehicles Freshman, sophomore and junior students who reside on the campus are not allowed to bring motor vehicles which require licensing to The American University. Seniors and non-resident students who are allowed to bring motor vehicles to the campus must register them at the Office of Student Accounts, display a valid parking permit and observe the University's parking and speed limit regulations.

Grading System Grade definitions used are: "A" (3 points), excellent; "B" (2 points), good; "C" (1 point), fair; "D" (0 points), poor; "F" (minus 1 point), failure; "S" satisfactory; "U" unsatisfactory; "I" incomplete; "W" official withdrawal. No credit is granted for the grade of "D" received by a graduate student in a graduate level course. The grade of "I" (incomplete) is given only to students who have made arrangements in advance with their instructor for the late completion of requirements in a course. A grade of "I" must be resolved to an "A," "B," "C," "D," or "F" by the instructor upon the completion or the failure to complete the requirements of the course within the time allowed. A grade of "W" may not be given by the instructor to remove a grade of "I."

When courses are repeated by students other than freshmen, the grades achieved in both attempts stand separately on the record and are used in the mathematical determination of the average. Only one attempt of a given course, however, may be counted toward fulfillment of graduation requirements.

Only grades earned at The American University are computed in the cumulative index. Credits accepted on transfer from other institutions are included in the total number of credit hours applicable to degree requirements but are not included in the cumulative index.

Since the Fall semester, 1963, a freshman student who, during the first two semesters of full-time study receives a grade of "F" in a course, may repeat the course within the calendar year thereafter or in the next two regular semesters in which the student is registered at The American University. No grade shall be removed from the record but when such a course is repeated only the grade earned the second time the course is taken shall be used in computation of the cumulative average for purposes of making decisions concerning probation, dismissal and required average for graduation.

A part-time freshman student who during his first twenty-four hours of study receives grades of "F" in courses may repeat these courses

within the calendar year after the semester in which the grades of "F" were received with resulting cumulative index benefits stated above.

Students who are readmitted to the University before they have begun their third semester of college work may, within one calendar year after their re-admission, retake courses in which they received grades of "F" during their first two semesters at The American University with the resulting cumulative index benefits stated above.

The foregoing regulations concerning repeated courses are not applicable to students who enter the University as transfer students, including those who enter as transfer students with freshman status (less than 30 hours).

Absences The University expects class attendance of all students. Absences must be justified to the instructors with the understanding that it is the responsibility of the student, if he is excused, to make up whatever work has been missed.

Veterans and other students studying at government expense are subject to the loss of educational benefits for excessive absences.

Reading and Research Courses Enrollment in Reading and Research Courses is limited to students who have been admitted to and are working on a degree program at this University. Non-degree and Consortium students from other universities are ineligible.

UNDERGRADUATE READING AND RESEARCH COURSES. An undergraduate student who wishes to enroll in these courses must be recommended by his major department, must have pursued the background courses essential to the successful pursuit of the proposed project, and must have completed 60 semester hours of college work, at least six of them in this University, with a cumulative academic index of 1.5 or better. Properly qualified undergraduate students may earn a maximum of 12 credit hours by independent study. Registrations will be accepted only during regular registration periods. Each course must be completed within a single session.

GRADUATE READING AND RESEARCH COURSES. A Master's degree student recommended by his department is eligible to register for a reading course after the completion of at least six hours of approved graduate work in residence with an average of B or better. A student may register for an independent research project (not for thesis purposes) after the completion of at least 12 hours of approved graduate work in residence with an average grade of B or better.

No Master's degree student may apply more than 9 hours of work in a reading course, independent research course, in-service project or institute toward meeting the course hour requirements for the Master's degree. Graduate reading courses must be completed within a single academic session (except that two five-week summer sessions may be allowed) and research projects must be completed within one calendar year after registration. For information on the Doctor's degree, see the Graduate Study section of this catalog.

REGISTRATION FOR READING AND RESEARCH COURSES. Students permitted to enroll in the independent study courses listed below should enter on their registration cards the indicator number (1-81) of the department which will supervise their work, followed by the number of the particular course to which they are being admitted, as indicated below.

Undergraduate Courses

- .390-91 Individual Study Project (3 each)
- .490-91 Individual Research Project (3 each)
- .398-99 Departmental Honors (3 each)—Juniors
- .498-99 Departmental Honors (3 each)—Seniors

Graduate Courses

- .099 Graduate Study (no credit)
Required of graduate students who are not enrolled in course work.
- .590 Reading Project (3)
- .690 Research Project (3)

Regular courses in the curricula of the departments may not be offered through the device of these independent studies. These courses are intended to provide the student with an opportunity to pursue special interests into areas not covered in other ways. For detailed instructions on registration for reading and research courses, consult the *Schedule of Classes Bulletin*.

Transcripts A student may obtain a transcript of his academic record from the Office of the Registrar. Any student may order one transcript free of charge; there is a nominal fee thereafter.

The University will not issue a transcript which reflects only a part of a student's record, nor will it make copies of transcripts on file from other colleges and universities.

Completion of Degree Requirements and Commencement Commencement exercises are held only in June. All students who expect to complete their degree requirements by the June commencement must file an "Application for Degree" in the Office of the Registrar according to the deadline dates published in the academic calendar in each *Schedule of Classes Bulletin*. A student who completes all degree requirements but who does not meet one or more of the deadline dates listed in the academic calendar for conferral of degrees at Commencement may obtain certification from the Registrar that the requirements have been completed and that the degree is to be awarded as of the close of the summer or fall session following. Formal conferral of the degree is made at the next annual June Commencement.

Grade Reports Grades will be mailed to students as soon as possible, usually within two weeks following the final examination period. Grade information will not be released by telephone or in person by the Office of the Registrar.

UNDERGRADUATE STUDIES

Admission

The minimum requirements for admission are listed in the following paragraphs. For possible additional admission requirements, a student should consult the section of this Catalog concerning the School or College which he wishes to enter.

Undergraduate Degree Majors The University offers the following Associate and Bachelor's degree programs:

COLLEGE OF ARTS AND SCIENCES

Associate in Arts in general studies; Bachelor of Science in biology,

chemistry, distributed sciences, medical technology, and physics; Bachelor of Arts in anthropology, broadcasting, economics, elementary education, English, fine arts, French, German, health, physical education and recreation, history, journalism, mathematics, music, philosophy, philosophy and religion, political science, psychology, public relations, religion, Russian, Spanish, speech arts, sociology, and statistics.

SCHOOL OF BUSINESS ADMINISTRATION

Associate in Business Administration; Bachelor of Science in Business Administration in general business, accounting, automatic data processing systems, finance, industrial relations, personnel and manpower management, international business, marketing, production (industrial) management, real estate, statistics, transportation, logistics and traffic management, and pre-law.

SCHOOL OF GOVERNMENT AND PUBLIC ADMINISTRATION

Bachelor of Arts in political science.

SCHOOL OF INTERNATIONAL SERVICE

Bachelor of Arts in international relations, foreign service, business representation overseas, international Christian service, overseas representation, international administration, overseas and international labor, and intelligence research and analysis.

SCHOOL OF NURSING

Bachelor of Arts in nursing.

COLLEGE OF CONTINUING EDUCATION

Associate in general studies; Bachelor of Science in General Studies in social science, business administration, and police administration.

Freshman Admission A graduate of an approved secondary school who has completed 16 acceptable units (at least 15 of which must be academic or college preparatory in nature including 4 units in English and 2 units in mathematics) with a minimum grade average of "C" or its numerical equivalent, who ranks in the upper half of the graduating class, and who achieves acceptable scores on the Scholastic Aptitude Tests of the College Entrance Examination Board, will be considered for freshman standing.

In addition to completing the forms supplied by the Office of Admissions, each applicant is required to submit a non-refundable \$15.00 application fee, an official secondary school transcript, and the official results of the Scholastic Aptitude Test and English and Mathematics Achievement Tests of the College Entrance Examination Board. These credentials must be filed by March 1 for the fall and summer sessions, and December 1 for the spring session.

For complete instructions on admission procedure please request "A Guide for Filing Application for Undergraduate Admission."

Transfer Admission Undergraduate students, applying for transfer to The American University, may normally expect to receive credit for appropriate courses taken at a regionally accredited four-year institution of higher learning and completed with a grade of C or better. No more than 60 credit hours of course work completed in a college transfer program at a two-year college may be accepted. Credits for courses taken in certain specified in-

stitutions not regionally accredited and which are completed with a grade of B or better may be accepted as transfer credit in individual cases up to a total of 60 credit hours. A maximum of 30 credit hours may be accepted on transfer from a combination of relevant work completed satisfactorily in a service school course recommended for baccalaureate credit by the American Council of Education, or for relevant college-level correspondence or extension courses completed through USAFI or through a regionally accredited institution which accepts the credits for its own degrees. Applications must be submitted by July 1 for the fall semester, December 1 for the spring semester and May 1 for the summer session.

Early Admission In addition to the general standards and procedures pertaining to all undergraduate applications, the University offers a special opportunity for early admission. The University welcomes early requests from students whose superior ability, academic achievement, and general maturity are such that after three years of high school they can expect to perform reasonably well on the college level. Many colleges and universities have accepted with excellent results carefully screened applicants who qualify in this way. This process is sometimes called admission without diploma but usually is identified as *early admission*. The Director of Admissions of The American University is happy to receive inquiries from high school principals or counselors or directly from prospective students about early admission criteria and procedures. Each case is considered on its own merits. The following factors, however, are important to evaluation:

1. The high school record with special reference to grades and the pattern of courses taken.
2. Performance on the College Entrance Examination Board Tests.
3. The recommendation of the high school principal and counselors.
4. An interview with the applicant by the Director of Admissions and the Dean of the College, or Associate Dean of the College.

Occasionally additional tests of ability, social maturity or interest may be required.

Advanced Placement and Advanced Standing The University offers several opportunities for entering students to earn academic credits and/or receive advanced placement. Entering freshmen may take the Comprehensive College Tests of the Educational Testing Service at the University during the summer. Qualified students may receive as many as 30 undergraduate hours in English composition, history, social sciences, humanities, mathematics and natural sciences.

An increasing number of secondary schools participate in the Advanced Placement program of the College Entrance Examination Board which permits students to take college level courses in some basic academic field as part of the twelfth grade program. The American University considers the examination results of participating students for purposes of granting advanced standing credit and/or advanced placement.

Waiver On the basis of tests and records the University may permit students to waive all or part of the undergraduate University requirements in composition and reading and in the humanities, social sciences and natural sciences.

Students are entitled to waive 1 unit of physical education for each 15 hours transferred or for each 6 months of active military service. Students over the age of 30, part-time students and students with appropriate medical excuses may also waive the physical education requirement.

Waiver examinations in physical education and foreign languages are given at the University during the course of the school year.

Students accepted with 60 hours of advanced standing by transfer may waive 6 hours of the distribution requirements. Those with 90 hours of advanced standing by transfer may waive 12 hours of the distribution requirements; however, no student may graduate without at least 6 hours in each of the three major distribution divisions.

When students transfer courses which are essentially "continuation courses" the grade earned in the final semester of such courses will determine whether the entire sequence is creditable for University requirements purposes only. (This regulation shall not be interpreted as granting credit hours for courses transferred with a grade below "B" or "C" according to the institution from which the courses are transferred.)

Re-Admission An undergraduate student whose study at the University is interrupted for any reason for a period of one semester or more (excluding the summer sessions) must apply for re-admission. If such re-admission is approved, he returns subject to the academic requirements and regulations in effect at the time of re-admission.

Class Standing The class to which a student belongs is determined at the end of each academic year on the basis of the number of semester hours he has successfully completed, including those accepted as transfer credit, as follows:

0-29	Freshman	60-89	Junior
30-59	Sophomore	90-120	Senior

Declaration of Undergraduate Major Each undergraduate is required no later than the completion of 60 credit hours of course work to make a formal declaration of his major field of study on a form available from the Deans' or departmental offices. The application must be approved by the Dean or Department Chairman and filed in the Office of the Registrar.

Changes in Major and in College or School An undergraduate student who wishes to change from one college or school to another or one major to another must receive the permission of the Dean and/or Department Chairman in charge of the program to which he wishes to transfer. This must be done on forms available from the Deans' Offices or departmental offices and filed in the Registrar's Office. A change in college, school or major affiliation, when approved, does not become effective until the beginning of the next session. It does not become effective if the student becomes subject to suspension or dismissal for failure to maintain University minimum standards.

Foreign Language Course Regulation It is necessary to complete successfully the second session of a beginning or intermediate foreign language course to receive academic credit for the first session of the same course. This includes beginning and intermediate intensive language courses. The grade in the first session of

the course will be included in the academic average whether the second semester is successfully completed or not.

Undergraduate Students A senior student with the permission of his department chairman or
ed for Graduate Credit Dean may enroll in specifically approved graduate courses not required for his undergraduate program. Such courses must be designated as graduate credit at the time the student registers for them. Retroactive application of these credits for such purpose is not permitted. Credits for these courses may be applied toward meeting the course requirements for a graduate degree after the student has been awarded his undergraduate degree and provided he is then admitted to graduate standing.

Transfer Credit Students who take courses in other college and universities for transfer credit to The American University must receive prior approval from their advisers and the Dean of their college. This work usually is undertaken during the summer in an institution near the student's home or as a part of an overseas study program (junior year abroad). Credit will be denied unless the student receives prior permission.

Graduation Requirements A minimum of 120 semester hours, excluding physical education requirements, with an overall average of 1.00 (C) in all course work taken at The American University is required for any bachelor's degree. The minimum acceptable grade for courses used to fulfill requirements of the undergraduate major is C. Course credit in the major field for which the grade of D is received may be used only as elective credit if it has not been repeated to meet the requirements of the major. At least 30 credit hours must be taken in residence. Additional requirements are listed in the section pertaining to each school and department.

For an Associate degree, a minimum of 60 hours, excluding physical education, is required. The grade average and residence requirements are the same as those for a bachelor's degree. Not all departments and schools offer the Associate degree. Consult the appropriate sections of this catalog for details on specific degrees.

Graduation Honors Undergraduate students are eligible to graduate with honors provided they have completed at least one-half of the credit hours of work required for their degree in residence at The American University and have achieved the requisite grade average. The average is based on courses taken at the University only. Undergraduate honors and the average required are as follows: Summa cum laude—2.9 or higher; magna cum laude—2.75 to 2.89; cum laude—2.50 to 2.749.

Bachelor's Degree The program required of the undergraduate student at The American
Requirements University may be divided in five components. These are:

UNIVERSITY REQUIREMENTS. A pattern of courses required of all students regardless of School or major.

COLLEGE OR SCHOOL REQUIREMENTS. Additional requirements of the College or the School in which the student is registered.

MAJOR REQUIREMENTS. Courses required by the School or department of the student's major interest.

RELATED STUDIES AND TOOL COURSES. Courses related to the major which are required by the major School or department.

ELECTIVES. Courses of the student's own choice to complete the required minimum of 120 academic credit hours for graduation.

University Requirements Program The regulations set forth below supersede all pre-existing regulations concerning University Requirements. The Committee on University Requirements may from time to time modify this program in some of its details. Students should check with their advisers concerning any revision in the University Requirements.

Students who were enrolled in degree programs of the University prior to the effective date of these regulations (September, 1965) may follow the regulations in force at the time of their latest admission to the University or may elect the new regulations with the concurrence of their academic advisers. No student may follow parts of both plans, but must select either one or the other.

The University Requirements constitute a pattern of courses in undergraduate education required of all students who earn either the Associate or the Bachelor's degree from The American University regardless of their school or major. These distribution requirements concern general education in the liberal arts in the broad areas of humanities, natural sciences and social sciences.

Approximately one-third of the 120 academic hours required for graduation is included in the University Requirements. The program offers great flexibility in the undergraduate program while retaining a distribution of studies in areas outside a student's major interest along with courses closely related to his major. If a student is unsure at the beginning of his undergraduate career as to his major subject, he may delay his selection of a major field until he completes his University Requirements. However, the student need not necessarily concentrate his University Requirements in his first two years but may begin major courses in his freshman year. In either case a careful and comprehensive academic plan should be formulated early, in order to avoid problems of scheduling courses which fulfill University or major requirements.

Candidates for any Associate or Bachelor's degree conferred by The American University must include the following course requirements in their academic programs unless relieved from the same by advanced placement, advanced standing, or waiver:

I BASIC STUDIES

Composition and Reading (Normally taken in the freshman year.) 6

Physical Education (4 one-semester units, no credit.)

II HUMANITIES (12 hours)

(Courses numbered below 500)

Art (Excluding studio or design courses.)

English (Excluding Composition and Reading and Advanced Composition.)

History (Excluding Historiography and Senior Seminar; total history credits may be counted in either humanities or social sciences, but not both.)

Languages and Linguistics (Excluding elementary and intermediate languages.)

Music (Excluding private lessons and performance courses.)

Philosophy and Religion

Speech Arts (Excluding practicum and performance courses.)

III NATURAL SCIENCES (12 hours)

(Courses numbered below 500)

Biology

Chemistry

Earth Sciences

Mathematics (Excluding all courses in statistics.)

Physics

IV SOCIAL SCIENCES (12 hours)

(Courses numbered below 500)

Anthropology

Economics

History (Excluding Historiography and Senior Seminar; total history credits may be counted in either humanities or social sciences, but not both.)

Sociology

Psychology (Excluding Experimental Psychology.)

Political Science

Explanatory note: Any course numbered below 500 which is acceptable for purposes of the College of Arts and Sciences Political Science major may be used as social science credit for University Requirements by any student in any school or major. Courses in Political Science are offered in the School of Government and Public Administration and the School of International Service.

Honors Courses Honors courses fulfill University requirements in the discipline in which they are taught. Honors courses are courses so designated by the Honors Board of the College of Arts and Sciences or by agreement between the schools teaching such courses and the Committee on University Requirements. Human Behavior IV is excluded from these courses.

A student who enrolls in courses not covered by the force of these regulations and who seeks credit toward meeting University requirements may petition for permission through the chairman of the department or the dean of the school in which the course is taught and with the consent of his adviser, to the Committee on University Requirements.

Probation and Dismissal An undergraduate student who fails to maintain a cumulative average of "C" (1.00) is subject to dismissal at the completion of 30, 60, or 90 hours of work. In the determination of the number of hours completed, credits accepted by transfer from another institution are included, but in the determination of the cumulative average, only grades earned at The American University are counted. A first-year undergraduate student whose cumulative average falls below "C" may, under certain circumstances, be continued on probation during a second year. Any undergraduate student is subject to dismissal at the end of any session in which his cumulative average falls below "D" (0 points).

Residence Requirements The last 30 credit hours of course work for any degree must be completed in Residence. An undergraduate student who transfers from another institution with advanced standing in the field of the major is

required to do a minimum of 12 credit hours of upper-level course work in the department of the college or school from which he is recommended for graduation. More may be required by the department chairman.

Courses of Study Programs and courses of study offered by each School and College, as well as specific undergraduate degree requirements, are shown elsewhere in this *Catalog*. For course descriptions and program requirements, the separate sections of the *Catalog* should be consulted.

GRADUATE STUDIES

Philosophy of Graduate Work Graduate programs in The American University recognize the need for advancing the horizons of man's understanding in both cultural development and professional competence. The University seeks to provide an environment that will encourage maturity of thought within the student's field of interest and opportunity for advanced study as well as directed research.

The University strives to make available an intellectual atmosphere so that the dedicated scholar finds it possible to progress toward fulfillment of his educational goals.

The true scholar is deeply committed to the extension of the boundaries of man's knowledge as he seeks truth for truth's sake. His aim is the advance in depth of some small segment of knowledge. His motto, though not always expressed, might well be that of the National Honor Society PHI KAPPA PHI, "The love of learning rules the world," or the Biblical expression "Ye shall know the truth and the truth shall make you free." Thus the urge behind the real scholar is enlightenment in civilization's advance and a willingness to contribute thereto in appreciation of a community which provides him with opportunity to pursue the above aims. Such a person is usually the epitome of the real scholar and reaches the goal of educational excellence by diligent application of ability and planned design, for excellency is no accident.

Graduate studies have always played an important role at the University since its founding. Its establishment and early development were directed to the need for programs of study beyond the regular four-year institution.

Graduate work is offered at the University in as broad a span of subjects as can be provided with the available resources. The purpose is to enable men and women to advance their learning and perfect the operation of their minds and the sensitivities of their tastes, to help them sharpen the instruments of sympathetic thought and approach the deep understanding that leads to reliable judgments.

The University endeavors to secure dedicated faculty of high quality and to continue improvement of facilities to meet its broadening obligations in education.

The University enjoys a strong nucleus of full-time graduate students whose number and quality have been continually increasing. It seeks to maintain this trend by adding more scholars of high quality from year to year. At the same time, it welcomes the many part-time students whom it has traditionally attracted. The full-time student benefits from the

circumstance that a large portion of our graduate students are far more mature than the usual graduate student body in the United States, bringing perspective to the learning process. This maturity is brought to the classroom largely by the part-time students who are engaged in their chosen vocations; their motivation is demonstrated by their willingness to devote their spare time to the rigorous pursuit of an objective, sacrificing alternatives in favor of a regime of systematic learning.

Graduate Education in Washington In the mid-twentieth century the urgency of offering more and better graduate education to all who can use it needs no justification beyond the obvious. Neither is it necessary to spell out in detail to students in each academic field covered in this *Catalog* the extra value added by carrying on this work in the Nation's Capital.

Simply put, Washington is a city of exciting persons, places, ideas, and events.

The University has enjoyed gratifying success in meeting the challenge of service at the highest academic level and in training men and women not only for academic life but for outstanding positions in national affairs. Its reputation rests firmly on the strength of its faculty, on a program developed to take advantage of the research facilities of the capital city, and on a student body drawn from leading universities in the United States and foreign countries.

In the classroom the graduate student at the University meets the members of a distinguished faculty and leading experts from government, education, and business. They deal, as thinkers and as practitioners, with the complex problems of modern society and they introduce the student to the latest developments in their fields. There can be a personal relationship with an unusual group of fellow students, many of whom hold positions of real responsibility in government and several other fields in this country and abroad. Through the faculty, the co-operating officials (many of whom are themselves part-time faculty members), and his fellows, a student can study and observe, for example, the institutions and forces that shape and execute the domestic and foreign policies of the nation.

Research may be conducted under the joint auspices of the University and one of the many agencies or institutions in Washington which through the years have cooperated effectively with the University, making available their rich stores of documentation and their highly advanced methods. Facilities of the other institutions of higher education in the Washington area provide an even greater educational center.

Degree Programs

Graduate programs in the University are offered in the areas listed below. This summary is brief and merely notes the fields in which the Master's and Doctor's degrees are given. More detailed and specific information concerning the particular offerings and degree requirements are given in sections of the *Catalog* concerning the College of Arts and Sciences and the various Schools. Most departments have developed a brochure that describes in considerable detail their offerings so that the prospective graduate student will find it helpful to make direct contact

with the department of his area of interest before applying for admission.

Master's Degree The University offers the following Master's degree programs:

THE COLLEGE OF ARTS AND SCIENCES offers programs leading to the Master of Arts degree in anthropology, art, broadcasting, church music, economics, education, English, French, German, history, journalism, linguistics, mathematics, music, philosophy, psychology, public relations, religion, Russian, sociology, Spanish, speech arts, and statistics. The College has programs leading to the Master of Science degree in biology, chemistry, and physics; to the Master of Education degree; and to the Master of Science in Science Teaching.

THE SCHOOL OF BUSINESS ADMINISTRATION offers programs leading to the degree of Master of Business Administration.

THE SCHOOL OF GOVERNMENT AND PUBLIC ADMINISTRATION offers programs leading to the degree of Master of Arts in government and public administration: technology of management; Master of Public Administration in public administration and public administration: technology of management.

THE SCHOOL OF INTERNATIONAL SERVICE offers programs leading to the degree of Master of Arts in international relations and Master of International Service. It also administers the program leading to the degree of Master of Arts in area studies.

COLLEGE OF CONTINUING EDUCATION offers a program leading to the Master of Science in Teaching and Master of Science in Correctional Administration.

Doctor's Degree The University offers programs leading to the Doctor of Philosophy degree in the following fields: area studies, business administration, chemistry, economics, education, government, history, international relations, mathematics, physics, psychology, public administration, public administration: technology of management, sociology, and statistics. The Doctor of Education degree is also offered.

The requirements for these degrees are stated in the various College and School sections of this catalog. Any School, College or Department, however, is entitled to increase the requirements listed in this section. Each student should read carefully the section of this catalog of the School or the College in which his major interest lies before definite study plans are made.

It should be remembered that in no field is the Doctor's degree earned by merely a set amount of work; it is awarded only upon the achievement of a high degree of scholarly qualification as judged by appropriate members of the faculty.

Area Studies Program Candidates for the Master's degree may pursue programs in Area Studies under the guidance of particular Schools or Departments of the University. This program is also available leading toward the doctoral Graduate degrees allowing for a very considerable area emphasis and is offered in business administration, economics, government, history, international relations and sociology.

The degree in Area Studies as such is offered in the School of International Service in the following fields: Far East (East Asia), Soviet Union and Eastern Europe, Western Europe, Middle East and North Africa, Latin America, South and Southeast Asia, and Africa. In special cases students may elect other areas but, if so, a portion of the student's course work may have to be taken at another university. Several suitable courses are available at other institutions in the Washington area.

Departmental Science Program The Master of Science in Science Teaching is administered under the joint supervision of the Division of Natural Sciences and Mathematics and the Department of Education. See section on College of Arts and Sciences.

Interdisciplinary Study Graduate work divided among Schools and Departments does not necessarily mean compartmentalized study. Most Schools and Departments permit an "outside" field as one of the comprehensive examinations for the doctorate, and some require this interdisciplinary breadth.

There is ample room in the normal curriculum for course work in other Schools and Departments at the doctoral level. In some areas of study, such as Public Administration and Business Administration, or International Relations and Comparative Government, the exposure to course work in more than one School is apt to be necessary for an understanding of the main area—in the first example as between the School of Government and Public Administration and the School of Business Administration, and in the second example as between the School of International Service and the School of Government and Public Administration. In other cases the student may wish to go far afield or to transfer a few credits from another field taken in another institution.

The Area Studies doctorate is broadly and deliberately interdisciplinary.

A student working toward a doctorate or Master's degree may take courses in the Wesley Theological Seminary and apply certain of them toward the requirements for the degree.

Agreement of Universities In cooperation with Catholic University, Georgetown University, George Washington University and Howard University, The American University offers its qualified graduate students the opportunity to enroll for graduate courses at these other universities. Such courses must be limited to those which are not offered by or which may not be immediately available at The American University. Credit earned in this program will be considered residence credit. To be eligible for this program, students must: (1) be fully admitted graduate students, (2) be actively enrolled, (3) be in good academic standing (2.00 or above), (4) be approved by the Registrar, (5) be approved by their Dean or Department Chairman who is responsible for securing approval at the cooperating university. Forms to be used for this program are available in the Registrar's Office. Students must follow the registration procedures and pay the tuition rate of this University. Auditors are not permitted.

Courses of Study Programs and courses of study offered by each School and the College as well as specific graduate requirements, are shown elsewhere in this *Catalog*. For *course descriptions* and program requirements, the separate sections of the *Catalog* should be consulted.

Types of Graduate Work In addition to the normal lecture-discussion courses and seminars, the program of graduate study provides opportunities for individual research projects (including case studies and in-service projects), professional institutes, and very limited opportunity for reading courses.

No more than a total of six hours (exclusive of non-thesis options) may be counted toward the hour requirements for the Master's degree in the form of reading courses, individual research projects, in-service projects, or professional institutes; nor more than nine hours for any two or more of these types of work combined. For the doctorate the limits are nine and eighteen hours, respectively, except that no more than six hours may be taken in individual research projects.

AN INDIVIDUAL RESEARCH PROJECT (apart from thesis, case study or dissertation) may be elected by a student for credit toward a graduate degree after he has completed a minimum of twelve semester hours of graduate work in residence with at least a "B" grade average. A proposal for an individual research project must be made by the student, through any instructor, to his Dean or Department Chairman. Approval of these projects is granted, each project separately, by the Dean concerned.

Individual research projects must be completed within one calendar year of the date of approval. The Dean, after reviewing the work submitted, may allow as much as six hours credit for the project, although a student is not permitted to register for more than three hours credit at the outset. If the additional three hours are approved, the student is required to formally add the hours and to pay the tuition charges.

AN IN-SERVICE PROJECT is an individual research project undertaken by a student working in a government, educational, business, or other selected organization concerning some aspect of its operation. Completion of a minimum of twelve hours of resident graduate study with at least a "B" average is a prerequisite for undertaking an in-service project. The project is supervised jointly by a member of the faculty and an official of the organization. The in-service project must be approved in advance by the Dean concerned, is offered initially for three hours of credit, and must be completed within one calendar year from the date of registration. The Dean reviews the work submitted and may allow as much as six hours of credit for any one project.

A PROFESSIONAL INSTITUTE is a specialized and intensive academic offering of the University designed primarily for persons engaged in professional fields. A student may earn credit toward an advanced degree in an institute which is approved for graduate credit only when the election is approved by the appropriate Dean or Department Chairman, when the student meets the prerequisites for registration in that institute, and when he enrolls according to its regulations. Institutes are listed in the *Schedule of Classes Bulletin* at the end of course lists.

A READING COURSE is an offering which the student may, under special circumstances, pursue on an individual basis with an appropriate number of tutorial conferences. In order to be eligible to register for either

a scheduled or an unscheduled reading course, a graduate student must be working toward a degree and have completed at least six hours of graduate study at the University with an average of "B" or better. In addition, approval of an *unscheduled* reading course is granted only if it seems to be justified as part of the student's educational program, if no course covering the subject is available, and if it is a course that the University could realistically be expected to offer. The respective Dean passes upon all unscheduled reading courses in his School or College, and approval must be secured before registration, on special forms provided for the purpose. The student is expected to (1) master material at least equivalent to that covered in a comparable course of the lecture-discussion type, (2) attend a minimum of four scheduled tutorial conferences, and (3) pass tests on the material assigned, including an end-of-course written examination.

THE SUMMER PROGRAM supplies an offering of courses and institutes. Some programs, such as the Master of Science in Science Teaching and the Master of Education, are also designed for those students who may be able to make some progress toward their degree objective during the summer.

EITHER FULL-TIME OR PART-TIME STUDY is available, the latter for those who work full-time at their vocations. Employment opportunities in Washington are excellent, and emphasis is placed increasingly on advanced education by the Federal Government and other employers. The University facilitates the education of part-time students by offering evening classes, many of them at the Downtown Center (19th and F Streets, N.W.), convenient to some of the major centers of government employment. Most evening classes meet once a week.

DEGREE AND NON-DEGREE work are available. If a student does not wish to pursue a degree program but desires to register for particular courses for which he has the necessary qualifications, he may be admitted to the College of Continuing Education as a *non-degree* student. He then receives full academic credit for courses taken (unless he registers as an auditor, in which case he is not responsible for attendance or examinations and does not receive a grade or academic credit). If a student enrolled in CCE wishes later to enter a degree program he may be considered for admission provided he has maintained a "B" average in graduate level work in CCE. He may transfer not more than 12 acceptable graduate credits earned in non-degree status toward a graduate degree program but all graduate level work will be included in computing a student's academic average.

Transfer in Degree Programs Changing from one Department or School to another requires admission to the Department or School to which transfer is desired and involves an evaluation of the courses previously taken in relation to the new degree objective. A student requesting such a transfer should reapply to the Office of Admissions, giving his reasons for the request. The transfer must be approved by the Dean or Chairman of the School or Department to which transfer is requested and need not be approved by the Dean or Chairman of the student's former School or Department.

In addition to the general requirements stated in earlier pages, a student must satisfy any further requirements of the School or Depart-

ment to which he wishes to transfer. Deficiencies are usually remedied by successfully completing certain additional undergraduate or graduate courses which the student must take soon after, if not before, being allowed to transfer.

A student who has been admitted to the University on a *non-degree* basis should take special care to apply early for admission toward a degree if he wishes to pursue a degree program.

Honor Awards and Other Financial Assistance

Scholarships, Fellowships, and Assistantships Each year a number of scholarships, fellowships, and assistantships are awarded to students of superior ability and special academic promise. The following awards for the academic year 1967-68 are typical of the kind available each year. Except where otherwise stated, tuition is paid by the recipient of the award and applications must be received not later than February 1.

Honor Awards The following awards are available for *full-time* study in any field, unless otherwise specified.

GRADUATE ASSISTANTSHIPS, \$2,000 plus full tuition—normally require academic duties for 15 to 20 hours per week.

COKEBURY AWARDS, \$500 to \$2,500—for Methodists who are U.S. citizens choosing a career in college teaching.

GUSTAVUS SWIFT FELLOWSHIPS, \$1,000 to \$3,000—for graduates of the Garrett Biblical Institute.

WASHINGTON SEMESTER SCHOLARSHIPS, full tuition for 5 courses—open only to former Washington Semester students.

ONE COLLIER ALUMNI SCHOLARSHIP, \$800—applicant must be nominated by the Board of Directors of American University Alumni Association.

ONE ZONTA CLUB FELLOWSHIP, \$400—for a woman preparing for a career in a profession.

MASSEY FOUNDATION FELLOWSHIPS, up to \$2,500—preference to Canadian citizens.

HALL OF NATIONS SCHOLARSHIPS, full tuition for one semester or half tuition for one year—for foreign students only.

SIX GOVERNMENT INTERNSHIPS, full tuition for 5 courses each semester, including 6 semester hours of supervised field work in a Government establishment.

ONE BORDEN P. BOWNE SCHOLARSHIP IN PHILOSOPHY, \$500 plus full tuition—for the study of Philosophy.

ONE HARVARD UNIVERSITY RECIPROCAL SCHOLARSHIP, full tuition for summer study at Harvard, and open only to graduating seniors and graduate students of The American University. *Application deadline May 1.*

Departmental and Teaching Assistantships These are available as indicated below. Application should be made directly to the Chairman of the School or Department in which the student desires to study.

In AREA STUDIES and INTERNATIONAL RELATIONS, \$450-650 per year.

In each of the Departments of the College of Arts and Sciences, \$2,000 per ten months and two courses per semester, plus academic duties 12-15 hours per week.

In BUSINESS ADMINISTRATION, \$2,000 per ten months, and two courses per semester.

One ROBERT V. FLETCHER ASSISTANTSHIP IN TRANSPORTATION, \$2,000 plus remitted tuition; requires academic duties for 15-20 hours per week with the Director of the Transportation Program. Deadline: May 1.

One ACCOUNTING FELLOWSHIP, \$1,800-\$2,000 and tuition for four courses each semester.

One AMERICAN SECURITY & TRUST CO. FELLOWSHIP IN FRANCE, \$1,500-\$2,000, renewable a second year.

Three UNITED CHURCH OF CHRIST SCHOLARSHIPS in African Studies, priority to American Missionary Society college graduates—\$1,000.

One NATIONAL ASSOCIATION OF HOME BUILDERS SCHOLARSHIP—up to \$1,000.

One MORTON J. LUCHS SCHOLARSHIP IN REAL ESTATE, \$700—includes possibility of summer or post-degree employment with Shannon & Luchs, Washington Realtors.

Several CHURCH DENOMINATION AWARDS to students in the School of International Service, ranging from \$500-\$1,000.

Five CATHERYN SECKLER-HUDSON FELLOWSHIPS—12 hours of tuition per semester.

One CHEVY CHASE MERCHANTS ASSOCIATION SCHOLARSHIP IN RETAILING AND MERCHANDISING—\$400.

SUMMER FELLOWSHIPS IN SCIENCE—for Graduate Teaching Assistants, between \$50 and \$75 per week plus tuition and fees, for study in science or an acceptable discipline; subject to approval by U. S. National Science Foundation. *Application deadline* is December 1.

NATIONAL EDUCATION ACT FELLOWSHIPS—

Title IV programs: South & South-East Asia.

Title VI: Russian & Spanish.

Three FORD FOUNDATION FELLOWSHIPS for Far East area studies—\$2,000.

Terms of Appointment Unless otherwise specified, the awards are for full-time study in any School or College of the University except the Washington College of Law.

To qualify for awards competition an applicant must (a) have maintained at least a "B" average, or its equivalent, in previous college studies, (b) have applied for admission to the School or College within which he wishes to pursue a full-time degree program and (c) have submitted a Scholarship Application and supporting recommendations to the Department Chairman of the College of Arts and Sciences, or

the Dean of the School in which he is to do graduate work no later than February 1, for the following academic year.

Appointments to scholarships, fellowships, and assistantships are ordinarily announced by April 1.

Awards are granted for only one year at a time and are not automatically renewed except in the case of the National Defense Education Act three-year fellowships. However, any student may enter competition each year for any awards, and with some awards there is a presumption of continuation.

Other Financial Assistance **STUDENT LOANS.** Student loans assist full-time students in meeting financial obligations and emergency needs. The amounts which may be borrowed, the interest rates, and the conditions of any loan are defined by the terms of the trust funds utilized. For example, the Phi Delta Gamma loan fund has been established for a woman pursuing an advanced degree. The Federal Government makes a large amount available under the National Defense Education Act, with reduction of up to 50% of the indebtedness for students who go into public elementary or secondary school teaching. Applications for student loans are placed with the Dean of Students.

RESIDENT COUNSELORS. Resident Counselorships providing room and board are available to both men and women. Applications should be made to the Dean of Students, Office of Student Personnel no later than March 1.

CAMPUS AND OTHER EMPLOYMENT. The University maintains a Placement Center to assist students enrolled in the University in finding part-time employment on and off the campus.

Master's Degree

Admission Consideration for admission to study for the Master's degree is normally open to students who hold a Bachelor's degree for a standard four-year curriculum in a regionally accredited institution of higher learning.

The applicant's undergraduate academic record and average must give evidence that he is qualified to enter a graduate program. An applicant may be required to complete undergraduate deficiencies during the early part of his graduate work at The American University and may not take courses above the 500 level until these are completed.

Admission to study for the Master's degree is a separate step from admission to study for the Bachelor's degree or the Doctor's degree.

An applicant for admission to a degree program must submit a completed application form to the Office of Admissions no later than June 1. In support of this application, he must ask each college or university which he has attended to send an official transcript of his record to the Office of Admissions.

Several of the Schools and Departments require the Graduate Record Examination or the Admission Test for Graduate Study in Business for admission. Other supporting documents, such as letters of recommendation or evidence of professional experience, may also be submitted in the interest of a more accurate estimate of any under-

graduate deficiencies which might have to be made up, or simply in support of favorable action on the application for admission.

A student must clear his admission status before he registers for courses.

In addition to the general requirements stated above, any further admission requirements may be found in the section of the *Catalog* of the School or College within which a student wishes to register.

Re-Admission A graduate student who has not been enrolled at The American University (or the Consortium of Universities) for one calendar year must file an application for re-admission unless he has maintained continuous registration by payment of the Graduate Study Fee each fall semester. Upon re-admission, the student will be subject to the \$20 Graduate Study Fee for each fall semester it was not paid. (See Required Graduate Study Registration, page 41.)

Course, Residence, Grade Requirements The minimum course requirements for all Master's degrees is thirty graduate hours, including up to six hours credit for thesis seminar when a thesis is written. Twenty-four of the thirty hours must be completed at the University in order to fulfill the residence requirement, including the thesis or non-thesis option. Work taken under the provisions of the Consortium of Universities is counted as residence credit.

A maximum of six hours of transfer credit toward completion of course requirements may be granted for work at other colleges or universities. In order to be transferred, the credits earned elsewhere must be graduate level courses taken after the student has received the Bachelor's degree, and they must be judged appropriate to the student's degree program by his Dean.

Once a student has been admitted to graduate work toward a degree he must obtain *prior* permission from his Dean or Department Chairman in order to take graduate work at another institution which will count toward his degree objective; otherwise such work will not be included.

Credit may be considered for transfer at the time of admission, provided the admission is not provisional.

The thirty-hour requirement allows inclusion of up to six hours of thesis or non-thesis option, if the thesis or non-thesis option has been completed within the framework of the appropriate seminars. These seminars are considered to be work taken in residence, even though the thesis may be written *in absentia* under the supervision of a faculty member of the University.

Although courses in which "C" grades have been received are counted toward the total hours required for a graduate degree, at least a "B" average in all of the graduate level course work taken at the University is required for permission to register for reading courses, in-service projects, or individual research projects, and for advancement to candidacy (where required), eligibility for comprehensive examinations, and certification for the Master's degree. The grade average is computed on the basis of all graduate courses taken at the University. Grades earned at other institutions, unless under the Consortium of Universities, may not be used to correct deficient grade averages at the University.

Periodically the appropriate Dean reviews each student's record; on the basis of this he may take such action as he deems appropriate. A graduate student who is not making satisfactory progress toward his degree objective, for any reason and as determined by the Dean or Department Chairman concerned, may be required to withdraw from graduate study at any time.

Advancement to Candidacy Some programs maintain a step in the progress of the graduate program that is known as Advancement to Candidacy. At this time an overall evaluation of the student's progress is made. The time and conditions for advancement are determined by the individual teaching units.

Tools of Research Each teaching unit specifies the tool of research requirement(s) in each case. Tools should relate to research in the discipline in which the student is studying. The student's satisfaction of tool requirements is certified by the teaching unit.

Comprehensive Examinations At least one written examination, the nature and scope of which is determined by the teaching unit will be required.

Each student should determine the number of comprehensive examinations that are required in his program.

Written comprehensive examinations for Master's degrees are designed to test mastery of a field of specialization. They presuppose more reading and research in the field than would normally be expected in a series of lecture-discussion courses. Examinations are expected to show not only knowledge of the subject matter and of appropriate professional literature, but also an ability to express intelligently comprehensive concepts and fundamental issues.

The Office of the Dean of Graduate Studies administers comprehensive examinations for the Master's degree twice a year, once in the Fall and once in the Spring. At the request of certain Schools and Departments, the Dean of Graduate Studies administers the comprehensive examinations in the summer. When administered by the Graduate Studies office, the examinations must be taken as a unit. A teaching unit may administer its own comprehensive examinations at times other than those indicated above. Applications must be made on a form provided for the purpose, approved by the student's Dean or Department Chairman, and stamped by the Office of Student Accounts. The approved application must be filed in the office of the Dean of Graduate Studies no later than the final dates announced in each *Schedule of Classes Bulletin*.

Although proposed fields for comprehensive examinations may have been determined as early as the first interview, it is possible to change the fields, with specific permission, up until the time when the student actually submits the application for admission to the comprehensive examinations. Each School and Department offers a list of standard comprehensive examination fields, including certain fields and areas in which candidates in particular degree programs must present themselves for examination. These are to be found in the requirements listed in the respective sections of this catalog. A student may choose from the remaining fields the ones which fit into his own interests and objectives.

In choosing a field outside of his major interest, the candidate is required to choose a field which is available at the time of his application to the comprehensive examinations.

Thesis and Non-Thesis Options The thesis is expected to demonstrate the student's capacity to carry on original and independent research. Some Schools and Departments of the University offer an opportunity to substitute a case study, an in-service project, an original creative work, or specific advanced research courses for a thesis for the Master's degree. (See the requirements for specific degrees.) In every such case, the seminar or other alternative to the thesis must be completed with a grade of at least "B" and is considered a part of the residence requirement for the Master's degree.

No academic credit is given for the Master's thesis unless the student registers for the Thesis Seminar. However, a student should not enroll for his seminar before he is ready to start work on his formal proposal or on the thesis itself.

An advisory committee is appointed for each candidate working on a thesis. The committee may be composed of one, two, or three members. An oral examination by this committee is normally required. Suggestions for revision may be made as conditions to be met before members will sign the title page of the thesis. If the chairman of the thesis committee or the department chairman certifies failure to complete a satisfactory thesis, the student is automatically dismissed from the University.

A student who writes a thesis must adhere to the required form and content for the proposal and to the other procedures described in detail in the Graduate Regulations which may be consulted in the Dean's Office.

Statute of Limitations All work for the master's degree must be completed within three years from the date of first enrollment in a graduate degree program.

EXPIRATION—A student who has not completed requirements in the time limits specified above must petition for readmission if he wishes to continue.

READMISSION—Continuation in the program may be granted once for a period of three years in the light of the requirements of the particular degree in effect at the time of readmission and may involve the taking of additional courses and/or other work. When a student is readmitted under these circumstances, the length of time he will be allowed to complete his degree requirements and any additional course, examination or other requirements which are deemed necessary by the teaching unit will be specified.

Required Graduate Study Registration The University requires students who have been admitted to graduate degree programs to register each year until they complete their total program. Accordingly, those who are not enrolled in any courses during the school year must register in one session of each year under the designation .099 Graduate Study (no credit). The school year is defined as beginning with the summer session and ending at the end of the spring semester. A student in this category is entitled to use the library and to consult with members of the faculty. A graduate student who does not so register, indicating his continued interest in completing his degree objective, may be subject to delay in his work or may be denied the right to continue his studies.

Doctor's Degree

Admission Admission to study for the Doctor's degree is a separate step from admission to study for a Master's degree, even if the Master's degree has been obtained from The American University. Admission will usually not be considered unless the applicant has a Master's degree from a regionally accredited institution, but may sometimes be considered on the basis of 30 semester hours of at least "B" grade graduate work from a regionally accredited institution. Admission may be granted when the applicant is enrolled in a Master's program at the University and has passed his Master's comprehensives with distinction. The applicant may "by-pass" the Master's degree and be admitted to a doctoral program. Some programs consider applications for admission to a doctoral program directly from a Bachelor's degree if the applicant is especially well qualified.

An applicant for admission to a degree program must submit a completed application form to the Office of Admissions no later than June 1. In support of this application, he must ask each college or university which he has attended to send an official transcript of his record to the Office of Admissions. In the case of doctoral applications from students who have not had previous graduate work at the University, two letters of recommendation from former professors are required as part of the admission credentials. In addition, several of the Schools and Departments require the Graduate Record Examination or an advanced test for graduate study, for admission. Other supporting documents, such as additional letters of recommendation or evidence of professional experience may also be submitted in the interest of a more accurate estimate of any deficiencies which might have to be made up, or simply in support of favorable action on the application for admission.

A student must clear his admission status before he registers for courses.

Re-Admission A graduate student who has not been enrolled at The American University (or the Consortium of Universities) for one calendar year must file an application for re-admission unless he has maintained continuous registration by payment of the Graduate Study Fee each fall semester. Upon re-admission, the student will be subject to the \$20 Graduate Study Fee for each fall semester it was not paid. (See Required Graduate Study Registration, page 45.)

Course, Residence, and Grade Requirements The requirement for a doctor's degree is the equivalent of 72 graduate hours. These hours may be distributed as 48 to 60 course hours (depending on the program followed) and 24 to 12 hours of directed research or non-credit dissertation seminar at the prevailing credit hour tuition rate. Residence requirements:

(a) For students who completed all course work for the master's degree or transferred up to six hours toward a master's degree at The American University, the minimum doctoral residence requirement is 30 hours beyond the master's degree and 12 hours of directed research or non-credit dissertation seminar. Students who completed a master's degree elsewhere may transfer a maximum of 30 graduate hours toward the doctoral requirements at The American

University. In both cases, the doctoral student must complete a minimum of 30 hours of appropriate graduate work and 12 hours of directed research or non-credit dissertation seminar after he has applied for and has been admitted to doctoral standing.

(b) For students who are admitted directly to doctoral program from undergraduate study and who complete their *entire* graduate program at The American University, the maximum credit hour requirement consists of 48 to 60 credit hours of graduate course work and 24 to 12 hours of directed study on the dissertation or of non-credit dissertation seminar.

Although courses in which "C" grades have been received are counted toward the total hours required for a graduate degree, a "B" average in all the graduate level courses taken at the University is required before the doctorate can be awarded. This is also a requirement for admission to comprehensive examinations, and final approval of dissertation topics. At least a "B" average is required for permission to register for reading courses, in-service projects, or individual research projects. Grades earned at other institutions unless earned through the Consortium of Universities may not be used to correct deficient grade averages at the University.

Advancement to Candidacy Some programs maintain a step in the progress of the graduate program that is known as Advancement to Candidacy. At this time an overall evaluation of the student's progress is made. The time and conditions for advancement are determined by the individual teaching units.

Tools of Research Each teaching unit specifies the tool of research requirement(s) in each case. Tools should relate to research in the discipline in which the student is studying. The student's satisfaction of tool requirements is certified by the teaching unit.

Comprehensive Examinations Four comprehensive examinations will be required; these must be passed by the student within a period of one year after completion of his residence requirements. Two of these examinations must be written. Examinations may be given *in absentia* only if arranged by the teaching unit. The required written examination for a master's degree administered at The American University may be used as the qualifying examination, displacing one doctoral examination, but in that event a substantial part of it must be written. (A qualifying examination is given to a graduate candidate to ascertain his readiness or preparedness to continue with graduate study.)

Written comprehensive examinations for the doctorate are designed to test mastery of both broad and specialized fields. They presuppose more reading and research in the fields than would normally be expected in a series of lecture-discussion courses. Examinations are expected to show not only knowledge of the subject and appropriate professional literature, but also an ability to express intelligently comprehensive concepts and fundamental issues.

The student's adviser, in conjunction with his dean or department chairman, determines the time and eligibility for taking the examinations.

The Office of the Dean of Graduate Studies administers comprehensive examinations twice a year, once in the Fall and once in the Spring. When administered by the Graduate Studies Office, they must be taken as a unit. Applications for admission to the examinations must be signed by the student's Dean or Department Chairman, stamped by the Office of Student Accounts, and filed in the Office of the Dean of Graduate Studies not later than the final dates listed in each *Schedule of Classes Bulletin*. A teaching unit may administer its own comprehensive examinations at times other than those indicated above.

Although proposed fields for comprehensive examinations may have been determined as early as the first interview, it is possible to change the fields, with specific permission, up until the time when the student actually submits the application for admission to the comprehensive examinations. Each School and Department offers a list of standard comprehensive examination fields, including certain fields and areas in which the candidates in particular degree programs must present themselves for examination. These are to be found in the requirements listed in the sections of this *Catalog* concerned with the various Schools and the College. A student may choose from the remaining fields the ones which fit into his own interests and objectives.

Each comprehensive examination paper is read by two readers and rated Distinction, Satisfactory, or Unsatisfactory by each reader. In case of disagreement a third reader may be appointed. The composite rating is decided by the concurring ratings of two readers.

A student who fails a qualifying or comprehensive examination may be permitted a second attempt within two years. The nature and extent of the examination to be retaken will be determined by the teaching unit. However, no more than one retake will be allowed.

Statute of Limitations All work for the doctorate must be completed within five years from the date of first enrollment as a doctoral student, (seven years if he entered a doctoral program directly from a bachelor's degree).

EXPIRATION—A student who has not completed requirements in the time limits specified above must petition for readmission if he wishes to continue.

READMISSION—Continuation in the program may be granted once for a period of three years in the light of the requirements of the particular degree in effect at the time of readmission and may involve the taking of additional courses and/or other work. When a student is readmitted under these circumstances, the length of time he will be allowed to complete his degree requirements and any additional course, examination or other requirements which are deemed necessary by the teaching unit will be specified.

The Dissertation and Oral Examination Capping the requirements for achieving the doctorate is the dissertation, together with the defense of the dissertation and the field in which it lies in an oral examination. This oral examination must be held at the University. The candidate must have completed all other academic requirements before the oral examination can be held.

When a candidate is ready to proceed to the dissertation he must submit a dissertation topic proposal reporting the results of his preliminary research. The proposal must contain, among other things, a con-

cise statement of the major problem of research and of supporting problems, the data to be used, a selected bibliography, a statement of the probable value or importance of the study, a brief description of the methods to be used, and a preliminary outline of the dissertation in some detail.

After approval of the proposal by the candidate's adviser it is presented to the Dean of his School or College for final approval. Acceptance of the proposal indicates that the topic is a suitable one and that the dissertation will be accepted if developed adequately by the candidate. Acceptance of a dissertation topic proposal under no circumstances commits any Department or School or the University to acceptance of the dissertation itself, however. The University will take responsibility for directing research only in fields and problem areas which its faculty members feel competent to handle.

A Dissertation Advisory Committee of either four or five persons is appointed by the Dean for each candidate undertaking a dissertation. After the draft manuscript has received the tentative approval of all members of the Committee, the Committee Chairman arranges for the oral examination. This covers the dissertation itself and the general field in which it lies. All members must agree that the candidate has passed the oral examination. Conditions to be met before final acceptance of the dissertation may be specified without necessarily holding a second oral examination.

If the chairman of the dissertation committee or the department chairman certifies failure to complete a satisfactory dissertation, the student is automatically dismissed from the University.

Students must either register for 12-24 hours of dissertation seminar or pay the equivalent dissertation supervision fee.

It is the policy of the University to encourage publication of dissertations, case studies, and theses, with acknowledgment to the University. In the event substantial alterations are made before publication, this fact must be noted in the prefacing statement which gives acknowledgment.

Regulations concerning the form and preparation of the final manuscript, abstract, copyright, and so forth may be obtained from the office of the Dean of Graduate Studies or any other Dean or Department Chairman offering the doctorate. Certain deadline dates, e.g., for submission of proposals, for submission of drafts, and for holding oral examinations, are found in each *Schedule of Classes Bulletin*, and must be met if a candidate expects to receive his degree at the following June Commencement.

Required Graduate Study Registration The University requires students who have been admitted to graduate degree programs to register each year until they complete their total program. Accordingly, those who are not enrolled in any courses during the school year must register in one session of each year under the designation .099 Graduate Study (no credit). The school year is defined as beginning with the summer session and ending at the end of the spring semester. A student in this category is entitled to use the library and to consult with members of the faculty. A graduate student who does not so register, indicating his continued interest in completing his degree objective, may be subject to delay in his work or may be denied the right to continue his studies.

Administration of Graduate Studies

Sumner O. Burhoe, Ph.D., *Dean of Graduate Studies and Director of Research*

Jack S. Reeder, M.A., *Administrative Assistant to Dean of Graduate Studies*

Donald W. Bowman, M.B.A., *Assistant Director of Research*

Yvonne C. Polisky, *Assistant to the Dean, Graduate Fellowships*

Patricia E. Dixon, *Secretary*

SPECIAL PROGRAMS

A variety of special programs add distinction to the intellectual and cultural climate of the campus. The brief description of each which follows can be supplemented by more detailed information available in the Office of Admissions.

Institutes An institute is a specialized and intensive academic offering of the University designed primarily for persons engaged in professional fields. Institute programs are developed in consultation with specialists in business organizations, government agencies, and national associations located in Washington and consist of formal lectures and seminar discussions, field and laboratory work, reading assignments and research projects. A partial listing of Institutes, Centers and special programs follows and other listings will be found under each College and School.

Center for Liberal Studies Associated with the College of Arts and Sciences, the Center sponsors an Artist-in-Residence from one of the liberal arts and also presents an annual spring forum when experts lecture at the University in sessions open to the Washington community.

Washington Semester Undergraduate honor students from 101 institutions throughout the United States come to The American University for one semester to study government in action through seminars, independent research, course work and field trips to government agencies. Many of the Washington Semester students return after graduation from their own colleges to pursue graduate work in areas opened to them through this program.

Consortium of Universities The American University is one of five institutions in Washington engaged in a program to coordinate the use of their respective graduate facilities. This program enables qualified students who are working toward a graduate degree to supplement courses available at their own universities with offerings at the other four.

Special Lectures Each year the Student Association and certain classes and clubs bring to the campus, as part of their regular programs, outstanding leaders in government and public administration for lectures and discussions with interested students. Senators, Representatives, staff members of Congress, administrative officers, political party officials and other public affairs leaders have met with students in recent years.

The Department of Philosophy and Religion also sponsors guest lecturers who include outstanding spokesmen in the area of philosophy and religion. This department sponsors the annual "Faith and Freedom" lectures which bring distinguished scholars to the campus to discuss some aspect of man's spiritual heritage relative to its implication for the concept of freedom. Lectures on religion are also sponsored by the Chaplains and the Inter-Religious Club Council.

Humanities Symposium In recent years the Division of the Humanities has sponsored an annual Humanities Symposium. This symposium, which brings a panel of scholars to the campus to discuss an announced topic, is conducted in the spring by one of the departments in the area of the humanities and the fine arts.

Off-Campus and In-Service Programs The College of Continuing Education, which is designed to meet the educational needs of part-time students, administers a program of credit and non-credit courses at twenty centers in the Washington area and at certain Army and Air Force installations in the South. The College also operates a degree-granting branch at Fort Benning, Ga. Course offerings are selected from all schools and departments of the University except the Washington College of Law and the School of Nursing.

Government Workshop Abroad The School of Government and Public Administration sponsors a Comparative Government Workshop Abroad as a part of its summer program. Students may earn academic credit by participating in a field study of foreign governments.

Center for Research in Social Systems The Center represents an evolution in the University's means for the management of research and service programs for various government agencies and private foundations. It is made up of several component institutes designed to bring professional talent to bear upon specific social service research, development, study and service problems in international and public affairs. The activities of the Center supplement those of the schools and departments of the University in administering research conducted by members of the academic faculty.

Credit Hours

The University operates on the semester credit hour system. One credit hour is equivalent to one 50 minute class meeting or two clock hours of laboratory work a week for approximately 15 weeks, plus an examination meeting in the sixteenth week.

Course Numbering System

Each course is designated by a four or five digit number. The digits preceding the decimal (1.-81.) identify the department in which the course is taught as follows:

- | | |
|---|--|
| 1.—Honors courses
(non-departmental) | 43.—Music |
| 3.—Anthropology | 44.—Applied Music |
| 5., 7.—Art | 45.—Hospital Training Program |
| 9.—Biology | 46.—Nursing |
| 10., 11., 12.—Business Administration | 47.—Philosophy and Religion |
| 15.—Chemistry | 49.—Health, Physical Education
and Recreation |
| 17.—Journalism, Broadcasting,
and Public Relations | 51.—Physics |
| 19.—Economics | 53., 54., 56.—Government and Public
Administration |
| 21.—Education | 55.—Technology and Administration |
| 23.—English | 57.—Psychology |
| 27.—Earth Sciences | 65.—Sociology |
| 29.—History | 67.—Speech Arts |
| 31.—Institutes | 69.—Statistics (Courses listed under
Mathematics section.) |
| 33.—International Service | 75.—Interdepartmental courses
(normally listed under
Economics, Government,
or International Service) |
| 37.—Languages and Linguistics | 81.—Interdepartmental Science |
| 39.—Law (See catalog of
Washington College of Law
for course listings.) | |
| 41.—Mathematics | |

A letter prefixing the course number indicates that the course was offered at one of the military installations in the South. All off-campus courses are equivalent to courses offered on the campus and are considered residence credit by the University. The last three digits identify the level of each course, as follows:

- | | |
|--------------------------------|---|
| .001-.099—no credit | .500-.599—advanced undergraduate
and graduate credit |
| .100-.499—undergraduate credit | .600-.799—graduate credit |

In no case will graduate credit be allowed for courses numbered below .500. Undergraduate students are not permitted to register for courses numbered .600 and above.





COLLEGE OF ARTS AND SCIENCES

THE COLLEGE OF ARTS AND SCIENCES was established in 1925 as the College of Liberal Arts. Subsequently, it grew in size and complexity, encompassing on the undergraduate level almost all of the traditional liberal arts and sciences within its programs and faculty. While the founders of The American University intended that the new institution in the nation's capital should develop primarily as a center of graduate studies, experience soon proved that a strong undergraduate program provided significant support for graduate work. Since its establishment, the College has increased its program and faculty to allow the granting of Bachelor's and Master's Degrees and in some fields the Doctorate.

Aims and Objectives The College is primarily concerned with liberal studies that convey an understanding of man and the universe and the relationship of men within it. On both the undergraduate and graduate level, the faculty constantly strives to meet this concern by offering educational programs of the highest quality. The academic programs are intended to develop perceptive judgments and an ability to enjoy the pursuit of knowledge throughout life.

A program of balanced general studies is required of all undergraduates and opportunities are afforded through honors programs and independent study for superior students to fulfill their highest intellectual potentialities. The College also makes provision for students to take advantage of advanced work under the direction of the major department in order to perfect skills and acquire the ability to utilize general concepts for the attainment of personal goals. The departments in the College offer graduate degree programs in which a capacity for original thinking, skill in research and correlation with other fields of knowledge are objectives of major consideration.

The College is a part of the only Protestant university in Washington. It attempts to confront students of all faiths with ultimate moral and religious issues in a community of free inquiry. It hopes thereby to free them from possible provincialism regarding the world, its people, and their problems.

Admission

Freshman Standing See page 24

Early Admission See page 25

Transfer Admission See page 24

Re-Admission See page 26

Advanced Placement,
Advanced Standing, and
Waiver of Courses See page 25

Graduate Admission Applications for admission to graduate study in the College of Arts and Sciences are carefully evaluated by the departmental chairman concerned and the Dean. This evaluation takes into account all available information relevant to admission including the results of the Graduate Record Examinations or of other standardized tests. (See individual departmental requirements.) In the special fields such as the fine arts, information regarding performance and other skills and talents is often required. Favorable admissions action also depends upon the ability of the department to assume responsibility for additional graduate students at that time.

Curricula and Degrees The College of Arts and Sciences offers curricula leading to the following degrees: the Associate in Arts, the Bachelor of Arts, the Bachelor of Science, the Master of Science in Science Teaching, the Master of Education, the Master of Science, the Master of Arts, and the Doctor of Philosophy and the Doctor of Education.

The requirements of the various degree programs are fully stated in this *Catalog*. *Each student is held responsible for his own status and progress relative to his particular objective.* The role of the academic adviser is to assist the student in his academic planning, not to control his course registrations in relation to various formal requirements. The Adviser, the Dean, and the Registrar are always glad to answer questions

UNDERGRADUATE PROGRAMS

Associate in Arts Degree Many high school graduates do not or for some reason cannot remain in college for four years, yet desire to complete a degree program. This fact, along with the development of the junior college, has contributed to the popularity of the Associate in Arts degree which may be awarded after successful completion of two years' study or its equivalent. The College offers the Associate in Arts degree in general studies only.

To receive an Associate in Arts degree the student must (1) complete University requirements, (2) complete through the intermediate level studies in a modern foreign language, and including the above (3) have a minimum 60 credit hours of course work and a cumulative average of "C" or better. In the College, the last 30 hours must be completed in residence.

Those interested in an Associate in Arts degree must make application in the Registrar's Office by the deadline published for all degrees in each *Fall Schedule of Classes Bulletin*.

Bachelor's Degree See page 27

Requirements The program required of the undergraduate student working toward a Bachelor's degree may be divided into five component parts:

- (1) University Requirements Program
- (2) College requirements
- (3) major requirements
- (4) related studies and tool courses
- (5) electives

University Requirements Program The University Requirements constitute a pattern of courses in undergraduate education required of all students who earn either the Associate or the Bachelor's degree from the University regardless of their school or major. These distribution requirements concern general education in the broad area of humanities, natural sciences and social sciences. Approximately one-third of the 120 academic hours required for graduation is included in the University requirements. For details see page 28.

College Requirements FOREIGN LANGUAGE. All undergraduate degree students in the College of Arts and Sciences must master study of a foreign language through the intermediate year. Individual departments of the College may designate specific languages to be used to fulfill the language requirement. Any exceptions to these must be approved by the department chairman involved. The requirement may be waived entirely or partly on the basis of high school achievement in language or a satisfactory score on the Departmental Placement Examinations and/or the Language Achievement Test of the College Entrance Examination Board.

Foreign students who have certified their proficiency in English to the satisfaction of the Office of Admissions may use English to meet the language requirement, providing that their native tongue is not English and they have secured the approval of their department chairman.

GRADUATE RECORD EXAMINATIONS. All graduating seniors in the College are required to take the advanced test of the Graduate Record Examinations in their major field. The area tests of the Graduate Record Examinations are administered to students in fields for which no advanced test is available. These tests are administered in the Spring session, usually in mid-March. Students completing graduation requirements at the end of the Summer or in the Fall session should take the examinations when offered at the University during the previous Spring session. Students should refer to the *Schedule of Classes Bulletin* for the specific schedule in any given year. Those who do not take the Graduate Record Examination when scheduled at the University must make arrangements to take the test at their own expense at an Educational Testing Service center. Information is available at the University Testing and Counseling Center and in the Office of the Dean of the College of Arts and Sciences.

Students who do not perform satisfactorily on these examinations (below one standard deviation below the national norm) will be permitted to graduate only on the basis of special recommendation of their departmental chairman. Other examinations, or additional course work beyond the minimum stated for graduation, may be required.

Major Requirements The University requirements and the College language requirement, as described, provide a broad intellectual basis of general education. By the end of the sophomore year, and frequently earlier, the student *must choose* a field of concentration, an academic major in one of the

departments of the College. It is in this field that he undertakes study in depth.

An academic major requires a minimum of 24 credit hours of course work in a field of concentration. In some departments 36 or more credit hours may be required. Specific requirements are indicated in the section of this *Catalog* which lists departmental offerings.

Those interested in the sciences, mathematics, and music need to take specific course which are prerequisite to other courses in the freshman year. These students should declare their interest as early as possible with the appropriate academic department and with the Associate Dean for Academic Counseling so that the proper sequence of studies can be arranged.

The requirements of a major, as well as University and College requirements, must be completed before clearance can be given for graduation.

MAJOR FIELDS OF STUDY. Major fields of study for the Bachelor of Arts or Bachelor of Science degrees are indicated along with the departmental course offerings. A single department may provide more than one specialization as, for example, in the case of the Department of Languages and Linguistics where an undergraduate degree may be earned in French, German, Russian, or Spanish.

APPLICATION FOR MAJOR. All students must apply to the department in which they wish to specialize. Admission to the University does not automatically constitute admission to a major program. This must be done on forms provided by the departments, the Dean's office and the Registrar's office no later than the end of the sophomore year. Acceptance is not official until specific approval has been received from the appropriate departmental chairman and is recorded in the Registrar's office.

Students on academic probation normally are not admitted to a major. Academic departments may establish standards beyond the minimum 1.00 cumulative average stated for the University as a whole for admission to major status.

TRANSFER OF MAJOR. Students who wish to transfer their majors from one department to another, or from one school to another, must go through the procedure described in the paragraph above. A change in College or School affiliation, when approved, does not become effective until the beginning of the session following the initiation of the request.

Related and Tool Courses Certain departments require students to take a minimum of 12 credit hours on the 300-level or above in fields related to the major. This is to encourage breadth and interdisciplinary interest. Some departments require minors or secondary concentrations.

Departments may also have a tool requirement, such as mathematics or statistics.

Related and tool requirements of the departments are stated, along with major requirements, in the departmental sections of this publication.

Electives In addition to University requirements, College requirements, major requirements, and related and tool requirements, the student will take elective courses to complete the minimum 120 credit hours necessary for graduation. Elective courses, which offer the student an opportunity to

pursue interests in fields unrelated to his major, are considered an important part of the academic program in the College.

Professional Programs Pre-professional curricula are offered in dentistry, medicine, law, physical therapy, medical technology, social work, secondary education, and theology. A student interested in one of these fields should consult the Associate Dean for Academic Counseling before his initial registration. An adviser representing the special field of interest will be assigned.

PHYSICAL THERAPY: In physical therapy, since upper-level courses are not offered at the University, it is expected that the student will transfer to a school having the required curriculum at the end of the sophomore year.

MEDICAL TECHNOLOGY: In medical technology the work of the senior year is completed in a local medical laboratory or hospital.

PRE-THEOLOGY: Many pre-theological students are attracted to The American University. The presence of the Wesley Theological Seminary on the campus, along with the offerings of the Department of Philosophy and Religion and the religious activities under the direction of the University Chaplain, provide excellent conditions for pre-professional studies in religion.

PRE-MEDICAL: The Association of American Medical Colleges (AAMC) publishes annually an *Admissions Requirement Handbook* on pre-medical programs and the requirements for admission to AAMC approved medical schools. The pre-medical student is urged to study a copy of this publication, which may be ordered through the Association of American Medical Colleges, Department 1B, 2530 Ridge Avenue, Evanston, Illinois.

Medical schools normally require a minimum of three years of undergraduate studies and strongly recommend completion of the Bachelor's degree. There is no inclination to prescribe the undergraduate major in view of an interest in students with varied intellectual concerns and backgrounds.

While there is some variation of practice, medical schools in general require the following undergraduate studies: two years of chemistry, one year of biology, one year of physics, and one year of English. In some instances one year of mathematics and two years of a modern foreign language also are required. It is emphasized that these are minimum requirements and, again, the student is urged to consult the *Admissions Requirement Handbook* (available in the offices of the Departments of Biology and Chemistry) and his adviser.

PRE-DENTISTRY: This basic pattern applies to pre-dental students as well as to others interested in veterinary medicine, medical technology, and other related fields.

It is usual for medical and dental schools to require a medical aptitude examination administered in the prospective student's junior year in college. The applicant is responsible for arranging for this examination and inquiries should be addressed to Medical College Admission Test, The Psychological Corporation, 304 East 45th Street, New York 17, N.Y.

A Pre-Medical Advisory Committee has been established in the College of Arts and Sciences. The purpose of this committee is to assist students in determining the admissions requirements of medical schools.

in filing for the Medical Aptitude Test, in securing letters of recommendation, etc. It is recommended that students interested in a career in medicine consult a member of the committee early in their undergraduate program.

GRADUATE PROGRAMS

The degree of Master of Arts may be earned in the College in the fields of anthropology, art, broadcasting, church music, economics, education, English, French, German, history, journalism, linguistics, mathematics, music, philosophy, psychology, public relations, religion, Russian, sociology, Spanish, speech arts, and statistics.

The Master of Science degree is offered in biology, chemistry, and physics. There are also programs leading to the Master of Education and the Master of Science in Science Teaching degrees which are especially designed for teachers.

For information regarding the Master of Science in Science Teaching (M.S.S.T.) degree students are referred to the co-ordinator of the program, presently Dr. Leo Schubert, the chairman of the major science department, and the chairman of the Department of Education. Students interested in the Master of Education (M.Ed.) program are referred to the chairman of the Department of Education.

The Doctor of Philosophy degree may be earned through the departments of the College in the fields of chemistry, economics, education, history, mathematics, physics, psychology, sociology, and statistics.

The Doctor of Education degree may be earned through the Department of Education.

Information on admission to graduate studies, advancement to candidacy, comprehensive examinations, and theses and dissertations may be found under departmental listings and in the section of the catalog dealing with Graduate Studies.

Statutory Limitations on Graduate Admission and Candidacy	Students admitted to Master's degree programs in the College must complete all work for the master's degree within three years from the date of first enrollment in a graduate degree program. Students admitted to doctoral degree programs should consult the section on graduate studies.
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Students must register for course work within one year of admission to graduate study.

The admission status of students who do not progress toward their degree objectives within these limits is automatically invalidated.

Some programs maintain a step in the progress of the graduate program known as Advancement to Candidacy. At this time an overall evaluation of the student's progress is made. The time and conditions for advancement are determined by the individual teaching units. Students should consult departmental offices.

Required Graduate Study Registration	See page 41
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Consortium of Universities	See page 33
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Professional Certificates in Education The Department of Education offers Professional Certificates in Elementary Education, Secondary Education, School Administration and Supervision, and the Work of the School Psychologist. The Psychologist Certificate requires the concurrence of the Department of Psychology.

Students who desire these certificates are required to follow a program of courses appropriate to the particular certificate. A minimum of 30 credit hours beyond the Master's degree must be completed with grades of B or better.

Professional certificates may be earned by students who register in non-degree status. Under these circumstances, however, no more than twelve credit hours (and this depending upon the relevance and the quality of the work) may be applied toward any degree for which the student subsequently is admitted.

ACADEMIC INFORMATION

General academic information and regulations are presented in the University's *Schedule of Classes Bulletins* and the forepart of this catalog which outline policy on academic loads, registration procedures, the grading system, University honors, and other subjects of interest to students and faculty. Unless otherwise indicated it can be assumed that the College operates under these regulations. Within minimum University requirements, however, a School or College may establish other policies for its own academic program.

The following regulations are applicable to all students in the College of Arts and Sciences:

Absences The obligation of undergraduate students to attend class sessions is assumed. Absences must be justified to instructors with the understanding that it is the student's responsibility, if excused, to make arrangements for make-up work.

Veterans and other students studying at government expense are subject to the loss of educational benefits for excessive absences.

Class attendance for graduate students is voluntary.

Academic Probation and Dismissal See page 29

Undergraduate students are required to maintain a 1.00 cumulative index (a "C" average).

An evaluation is made of a student's academic record at the end of each year of full-time study (freshman, sophomore, junior), or its equivalent in the case of part-time students.

A freshman who fails to achieve a 1.00 index ("C" average) during his first two semesters (24-30 credit hours), but whose cumulative index is .750 or above, may be placed on academic probation for his second year at the discretion of the Dean.

Sophomores and juniors who do not meet the minimum 1.00 cumulative index are subject to dismissal.

Students who enter their senior year in good standing but who drop below a 1.00 cumulative index any time thereafter are subject to dismissal.

Performance in the Major The minimum acceptable grade for courses used in fulfillment of the requirements of the undergraduate major is C. Course credit in the major

field for which the grade of D is received may be used as elective credit. If in computing all of these grades together, however, the student has less than a 1.00 average in the courses of his major field he is subject immediately to dismissal, regardless of the cumulative index.

Dean's List The College of Arts and Sciences publishes a Dean's List after each Fall and Spring semester. A student who achieves a minimum of 2.50 semester average and completes not less than 15 credit hours of work in the semester will be included in the Dean's List.

Graduate Credit for Seniors See page 27

Students in the College of Arts and Sciences will not be permitted to earn graduate credit before the last semester of the senior year.

Residence Requirements See page 29

An undergraduate student who transfers from another institution with advanced standing in the field of the major is required to do a minimum of 18 credit hours of upper-level course work in the department of the College from which he is recommended for graduation. More may be required by the department chairman.

Transfer Credit See page 27

THE HONORS CURRICULUM

A special Honors Curriculum has been established within the College and exists on three levels: Honors English for freshmen, General Honors for sophomores, juniors, and seniors, and Departmental Honors for juniors and seniors.

Honors English (Freshmen) Freshmen are selected for admission to the special program in Honors English on the basis of their academic records of high school achievement and their College Board scores. Students are notified of this appointment during summer orientation or prior to their registration in September. From among the participants in the freshman Honors English program, eligible students will be invited to join the General Honors Colloquia in the sophomore year.

General Honors Students who are selected for General Honors take a series of five or six colloquia across consecutive semesters under the direction of Honors Faculty. The topics vary but are usually drawn from the humanities and the social and natural sciences. Special attention is given to value and relational considerations and, generally, to theoretical topics.

The Honors Colloquia are carried by students as elective courses for three semester hours of academic credit in each semester of General Honors study. It should be noted that Honors Colloquia are credited toward University Requirements in the appropriate field.

Students are invited to participate in the colloquia after careful analysis of previous achievement in college work. Interested students may apply for admission to General Honors study through the Office of the Dean of the College of Arts and Sciences. Upon the successful completion of the colloquia, the designation "General Honors" is indicated on the commencement program.

Departmental Honors Departmental Honors study, limited to juniors and seniors, is under the direction of the chairman of the department in which the student is a major.

Up to 12 credit hours may be awarded for Departmental Honors projects. This usually is at the rate of three credit hours each semester across the four semesters of the junior and senior years.

This study is handled on a tutorial basis, with the Honors candidate doing independent study in an area of special interest. Any major with a superior academic record may apply to his department for this special privilege. Those who complete this sequence graduate with "Departmental Honors," a distinction which is indicated on the commencement program.

CENTER FOR LIBERAL STUDIES

The Center for Liberal Studies is a non-departmental agency governed by a Board of Directors which is responsible to the Dean of the College of Arts and Sciences. The purpose of the Center is to enhance the importance of the humanities, both in the University and in the greater Washington community as well.

The Center sponsors an Artist-in-Residence program which has brought to the campus, at various times, a painter, a composer and a playwright. In addition, the Center sponsors study, research and creative endeavors in philosophy, letters and the arts, seeking, at the same time, ways in which these areas may be more effectively developed in the curriculum.

A major activity of the Center in recent years has been the sponsorship of an annual Forum which brings to the campus a number of scholars and artists for lectures, discussions and other presentations centering around a common theme that cuts across the lines of departmental specialization. The Forum also provides opportunity for student-faculty discussions relating to the Forum topic. The Forum has rapidly become one of the most significant events in the cultural life of the University and the Washington community. The Forum topics include:

- 1964 Designing the Urban Environment
- 1965 The Search for Meaning in the Mid-Sixties
- 1966 The Arts in the New World of Machines
- 1967 Free Man and the Future
- 1968 The Contemporary Artist and "The Tradition"

SPECIAL LECTURES

Convocations and lectures are an integral part of the intellectual experience of the University community. Two important lectureships have been established in the College: The Faith and Freedom Lectures and the Bishop John Fletcher Hurst Philosophy Lectures.

THE FAITH AND FREEDOM LECTURES

The Faith and Freedom Lectures, as the name suggests, bring distinguished scholars to the campus to discuss some aspect of man's spiritual heritage relative to its implication for the concept of freedom. The lecturers in this series have been as follows:

<i>Year</i>	<i>Lecturer</i>
1959	Dr. Nels F. S. Ferre, <i>Professor of Theology</i> Andover-Newton Theological Seminary
1960	Dr. Paul Tillich, <i>University Professor</i> Harvard University
1961	Dr. Hans Morgenthau, <i>Professor of Political Science</i> University of Chicago
1962	Dr. John Wild, <i>Professor of Philosophy</i> Northwestern University
1964	Professor Paul Lehmann, <i>Auburn Professor of Systematic Theology</i> Union Theological Seminary
1965	John Courtney Murray, S.J., <i>Professor of Theology</i> Woodstock College
1966	Dr. Martin E. Marty, <i>Professor of Church History</i> University of Chicago
1967	Dr. John C. Bennett, <i>President</i> Union Theological Seminary

THE BISHOP JOHN FLETCHER HURST PHILOSOPHY LECTURES

These lectures were established in honor of the founder of the University. Each year some philosophical theme is developed by a prominent scholar in this field. The lectures in this series have been as follows:

<i>Year</i>	<i>Lecturer</i>	<i>Subject</i>
1958	Dr. Walter Kaufmann <i>Professor of Philosophy</i> Princeton University	"The Significance of Martin Buber"
1959	Dr. Richard Brandt <i>Professor of Philosophy</i> Swarthmore College	"Ethical Relativism"
1960	Dr. Maurice Mandelbaum <i>Professor of Philosophy</i> The Johns-Hopkins University	"Historicism, a Key to the Nineteenth Century"
1961	Dr. George Shrader <i>Professor of Philosophy</i> Yale University	"Ethics and Existence"
1962	Dr. Justus Buchler <i>Professor of Philosophy</i> Columbia University	"Reflections on the Problem of Meaning"

1963	Dr. Brand Blanshard <i>Professor of Philosophy</i> Yale University	"The Sane and the Eccentric in Present Day Thought"
1964	Professor Ernest Nagel <i>Professor of Philosophy</i> Columbia University	"Determinism and Human Action"
1965	Dr. Stuart Hampshire <i>Professor of Philosophy</i> Princeton University	"The Power to Act"
1966	Dr. Wilfrid Sellers <i>Professor of Philosophy</i> University of Pittsburgh	"Science and Ethics: A Study in First Principles"
1967	Professor Hans Jonas <i>Professor of Philosophy</i> New School for Social Research	"Jewish and Christian Elements in the Western Philosophical Tradition"

THE HUMANITIES SYMPOSIUM

For the past several years the Division of the Humanities has sponsored an annual Humanities Symposium. This symposium, which brings a panel of scholars to the campus to discuss an announced topic, is conducted in the Spring by one of the departments in the area of the humanities and the fine arts. It has become an important event on the calendar of the University.

COURSES OF INSTRUCTION

The following pages describe by divisions the offerings of the departments of the College of Arts and Sciences. Session *Schedule of Classes Bulletins* are published three times annually (Fall, Spring, and Summer) and should be used for registration purposes. The University reserves the right to cancel or change any course listings in this bulletin or other published announcement at any time.

Course Numbering System See page 48

Undergraduate Reading
and Research Courses See page 22

Graduate Reading and Master's degree students see page 22
Research Courses Doctoral students see page 34

Registration for Reading
and Research Courses See page 22

DIVISION OF HUMANITIES

English

Professors:

RUDOLPH VON ABELE
 MERRITT C. BATCHELDER
 CHARLES M. CLARK (*Chairman*)
 HAZEL H. FEAGANS (*Emeritus*)
 LOUISE M. YOUNG

Associate Professors:

PIERRE HAN
 FAYE L. KELLY
 MARY M. PATTON
 JEANNE A. ROBERTS

Assistant Professors:

RAYMOND W. AIKEN
 ARTHUR P. BEAN, JR.
 MARY ANN G. HOOD
 EDWARD KESSLER
 FRANCES H. KING

CHARLES LARSON
 DOROTHY A. OWENS
 WILLIAM EARL STAHR
 FRANK TURAJ
 SHIRLEY P. YARNALL
 FRANCIS E. ZAPATKA

Instructors:

DINSHAW BURJORJEE
 CHARLES P. CORN
 BARBARA RASCHIN

Adjunct Professors:

EDWIN E. GUNBERG
 RALPH ROBIN

Professorial Lecturers:

ROBERT B. ANDERSON
 JOHN C. CLENDENIN

GERALD ELBERS
 BENJAMIN HENRY
 PHILIP W. IDE
 WILLIAM MOSIER
 JOHN W. YARNALL

Lecturers:

THELMA K. BURKHALTER
 DORIS N. CELARIER
 SYDNEY CONNOR
 BARBARA K. GELEHRIER
 ANITA Y. HERSEY
 BARBARA LEFCOWITZ
 VIRGINIA R. RAPPORT
 WALTER S. RUSSELL
 WILLIAM H. STRUHS, JR.
 MARGARET L. WEAVER

UNDERGRADUATE DEGREE

Bachelor of Arts

University Requirements See page 28

Composition and Reading	(6 hours)
Physical Education	(4 units—non credit)
Humanities are normally satisfied by major and related requirements.	
Consult department	(12 hours)
Science and Mathematics	(12 hours)
Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Recommended languages: French or German. With departmental permission, Spanish or Russian may be substituted.

Departmental Requirements MAJOR COURSES (36 hours)

23.115 Approaches to Literature (3); Survey courses in English and American Literature (12); 23.392 Senior Undergraduate Seminar (3); and 18 additional hours in literature, writing, or English language. Students planning to teach should elect at least three credits in English language or linguistics.

RELATED COURSES (12 hours)

Either 12 hours of courses in one related field, as a minor; or six hours of courses in each of two related fields. The following fields are recommended: art, history, journalism, linguistics, music, philosophy, speech arts, foreign literatures.

TOOL COURSES

None

Electives To complete minimum of 120 hours plus non credit physical education.

SECONDARY SCHOOL TEACHER TRAINING

The Department of English, in cooperation with the Department of Education, offers a curriculum which will lead to certification for teaching English at the high school level. Students who have selected this as their vocational objective should see the teacher education advisor in the English Department during the second semester of the Freshman year.

GRADUATE DEGREE

Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.

Master of Arts

Course Requirements Minimum of 30 hours of approved graduate work, including 23.720 Graduate Seminar in English Literature (3) and/or 23.730 Graduate Seminar in American Literature (3); and 23.797 Master's Thesis Seminar (6).

Written Comprehensive Examinations: Two, including one general examination in English and American literature guided by a reading list; and one in a specialized field chosen in consultation with the English Department.

Other Requirements Proficiency examination in French or German; Thesis.

Graduate Comprehensive Examination Fields GROUP A. 23.100 General Examination in English and American Literature.

GROUP B. A selection of one specialized field as approved by the English Department:

- 23.200 An Historical Period of English Literature
- 23.300 An Historical Period of American Literature
- 23.400 An Aspect of Comparative Literature
- 23.500 Literary Theory and Criticism

UNDERGRADUATE COURSES

1.100 Honors English I (3)

Limited to first-year students whose registration is approved by the Honors Board of the College of Arts and Sciences, or by the Dean, School of International Service.

1.101 Honors English II (3)

Limited to first-year students whose registration is approved by the Honors Board of the College of Arts and Sciences, or by the Dean, School of International Service.

23.010 English Workshop (0)

A review course for non-native speakers of English. Classes and tutorials in the principal skills of communication in English. Admission on the basis of examination. Tuition, part-time students, regular three credit hour charge.

23.100 Composition and Reading I (3)

Training and practice in writing and critical reading. Concepts of language and rhetoric as the basis for effective expression in English.

23.101 Composition and Reading II (3)

Continuation of 23.100. Includes the techniques of library research, the organization and writing of a documented research paper.

Prerequisite: 23.100.

Special Sections:

23.100-23.101 (FS) (3, 3)

A section of Composition and Reading designed for foreign students. Similar in content to the regular sections. Foreign students whose competence in English makes them eligible for college-level work are assigned to this section so that attention can be given to their special language problems.

23.103 Advanced Composition (3)

Expository writing. For students who have completed Composition and Reading (6) and wish continued training and practice in the skills of writing. *Prerequisite:* 23.101.

23.115 Approaches to Literature (3)

An introduction to the study of literature. Techniques for analyzing a literary work; literary traditions and conventions; the major genres. Readings, discussions, papers. *A required course for beginning English majors.* *Prerequisite:* permission.

23.120 World Literature I (3)

Introduction to literary forms and masterpieces of Western civilization from the ancient Greeks to the 18th century. Primarily for students not majoring in English.

23.121 World Literature II (3)

Introduction to literary forms and masterpieces of Western civilization in the 19th and 20th centuries. Primarily for students not majoring in English.

23.310 English Literature I (3)

Survey of English prose and poetry from beginnings to the mid-18th century. *Prerequisite to advanced courses in English Literature.*

23.311 English Literature II (3)

Survey of English prose and poetry from mid-18th century to the 20th century. *Prerequisite to advanced courses in English Literature.*

23.320 American Literature I (3)

A survey of American literature from the colonial period to about 1860. *Prerequisite to advanced courses in American Literature.*

- 23.321 American Literature II (3)**
A survey of American literature from 1860 to the 20th century.
Prerequisite to advanced courses in American Literature.
- 23.330 The Short Story (3)**
Development of the short story as an art form. Reading and analysis of stories by 19th and 20th century writers.
- 23.331 Aspects of Poetry (3)**
Study of poetic forms and techniques, using a non-historical approach. Reading and analysis of English and American poems.
- 23.333 Literary Criticism (3)**
Readings in the mainstream of criticism and critical theory, from Plato to the present.
Prerequisite: one year of literature.
- 23.392 Senior Undergraduate Seminar in English (3)**
An integrating seminar for majors. Review of the aims, methods, and materials of literary study and research. Readings, discussions, field trips, papers.
A required course for seniors majoring in English.
Prerequisite: Departmental permission.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 700-level courses are open only to graduate students.)

- 23.503 History of the English Language (3)**
Development of the language from Old English to Modern English, with special studies on phonology, grammar, and vocabulary.
Prerequisite: senior or graduate standing.
- 23.504 Modern American English (3)**
The structure of American English, with emphasis on the application of modern linguistic science to the teaching of grammar and writing.
Prerequisite: senior or graduate standing.
- 23.510 Creative Writing I (3)**
Training in writing prose and poetry through individual literary projects suited to the student's needs and interests.
Prerequisite: permission of instructor.
- 23.511 Creative Writing II (3)**
Style and structure in writing prose and poetry. Practice in writing essays, short stories, and poems. Readings, discussions, conferences.
Prerequisite: permission of instructor.
- 23.520 Chaucer I (3)**
Introduction to the reading of Chaucer's poetry. Chaucer as man and poet, and his 14th century background. Readings in *The Canterbury Tales*.
Prerequisite: 23.310 and 23.311.
- 23.521 Chaucer II (3)**
Readings in *The Canterbury Tales*, *Troilus and Criseyde*, and some of the minor poems.
Prerequisite: 23.520, or permission.
- 23.522 English Drama: 10th Century to 1642 (3)**
The development of English drama through the study of the plays of the predecessors and contemporaries of Shakespeare and the post-Elizabethan playwrights.
Prerequisite: 23.310 and 23.311 or permission.

- 23.523 Renaissance Literature (3)**
Literature of the Renaissance in Italy, France, England, exclusive of drama, with emphasis upon the literature of the Tudor period in England.
Prerequisite: 23.310 and 23.311.
- 23.524 Shakespeare I (3)**
The earlier plays, with attention to the development of Shakespeare's artistry, his use of sources, the social and political backgrounds.
Prerequisite: 23.310 and 23.311 or permission.
- 23.525 Shakespeare II (3)**
The later plays.
Prerequisite: 23.310 and 23.311 or permission.
- 23.526 Seventeenth Century Literature (3)**
Commonwealth and Restoration Literature, with some attention to continental literature of the century, exclusive of drama.
Prerequisite: 23.310 and 23.311.
- 23.527 Milton (3)**
Readings in the major and minor poems, with special attention to Paradise Lost. Some readings in his prose works.
Prerequisite: 23.310 and 23.311.
- 23.528 Studies in 18th Century Literature (3)**
Literature of 18th century England, with special reference to outstanding authors and dominant literary forms in the neoclassical tradition.
Prerequisite: 23.310 and 23.311.
- 23.529 Restoration and 18th Century Drama (3)**
English drama from Dryden to Sheridan.
Prerequisite: 23.310 and 23.311 or permission.
- 23.531 The English Novel I (3)**
The English novel in the 18th century. Reading of selected novels by Defoe, Richardson, Fielding, Smollett, Sterne, and Walpole.
Prerequisite: 23.310 and 23.311.
- 23.532 The English Novel II (3)**
The English novel during the 19th century. Selected novels by Scott, Austen, Dickens, Thackeray, Eliot, and Hardy.
Prerequisite: 23.310 and 23.311.
- 23.533 Romantic Literature I (3)**
A study of English literature of the Romantic Movement, with emphasis on Blake, Burns, Wordsworth and Coleridge.
Prerequisite: 23.310 and 23.311.
- 23.534 Romantic Literature II (3)**
A study of the chief writings of Byron, Shelley, and Keats, along with their 19th century contemporaries.
Prerequisite: 23.310 and 23.311.
- 23.535 Victorian Prose (3)**
The Victorian Age in English literature, as reflected in the work of selected major prose writers.
Prerequisite: 23.310 and 23.311.
- 23.536 Victorian Poetry (3)**
The major Victorian poets, Tennyson to Hopkins.
Prerequisite: 23.310 and 23.311.
- 23.537 Modern British Literature (3)**
British literature from 1900 to the present, exclusive of drama. Emphasis on major writers.
Prerequisite: 23.310 and 23.311.

- 23.538 British Drama: 19th and 20th centuries (3)**
British drama from Sheridan to the present.
Prerequisite: 23.310 and 23.311 or 67.551.
- 23.540 Emerson and His Era (3)**
Study of the artistic achievement of the "American Renaissance" as embodied in the writings of Emerson, Thoreau, Hawthorne, and Melville.
Prerequisite: 23.320 and 23.321.
- 23.541 Howells and His Era (3)**
A study of post-bellum literary movements as reflected in the writings of Whitman, Howells, Twain, and Henry James.
Prerequisite: 23.320 and 23.321.
- 23.542 The Romantic Tradition (3)**
A comparative study of 19th century American literature and English literature of the Romantic Movement.
Prerequisite: 23.310 and 23.311, and 23.320 and 23.321.
- 23.543 The Realist Tradition (3)**
A comparative study of late 19th century American literature and English literature as related to the rise of Realism and Naturalism.
Prerequisite: 23.310 and 23.311 and 23.320 and 23.321.
- 23.544 The American Novel I (3)**
Development of the novel 1830-1900 as exemplified in the writings of major figures.
Prerequisite: 23.320 and 23.321.
- 23.545 The American Novel II (3)**
The development of the novel in the twentieth century through a reading of representative works by major figures.
Prerequisite: 23.320 and 23.321.
- 23.546 Poetry in America (3)**
A study of selected American poets, with attention to the central traditions of American poetry.
Prerequisite: Permission.
- 23.547 Modern American Literature (3)**
Literature since 1900, with special attention to the period since 1920.
Prerequisite: 23.320 and 23.321.
- 23.549 Modern American Drama (3)**
American drama from O'Neill to the present.
Prerequisite: 23.320 and 23.321 or 67.556.
- 23.550 Classical Drama (3)**
A study of Greek and Roman tragedy and comedy through the reading of selected works in translation.
Prerequisite: Permission.
- 23.552 Comparative Literature I (3)**
Comparative study of the writings of European authors in the Romantic tradition: Rousseau, Goethe, Stendahl, and others.
Prerequisite: Upperclass or graduate standing.
- 23.553 Comparative Literature II (3)**
Comparative study of the writings of European authors of the late 19th and early 20th centuries: Nietzsche, Zola, Ibsen and others.
Prerequisite: Upperclass or graduate standing.
- 23.554 Contemporary European Literature (3)**
Comparative study of recent European writers.
Prerequisite: Upperclass or graduate standing.

- 23.555 Major European Novels I (3)**
Intensive study of major French and Russian novels of the 19th century. (In translation.)
Prerequisite: Permission.
- 23.556 Major European Novels II (3)**
Intensive study of major novels of 20th century. (In translation.)
Prerequisite: Permission.
- 23.557 Modern European Drama (3)**
Representative plays of European playwrights exclusive of the British Isles from the late 19th century to the present.
Prerequisite: Permission or 67.551.
- 23.570 Interrelation of the Arts (3)**
Study of the varieties and channels of relationship among the major arts (literature, painting, sculpture, architecture, and music).
Prerequisite: Upperclass or graduate standing.
- 23.572 Problems in Literary Criticism (3)**
Intensive study of a specific problem in literary esthetics, the problem to vary from year to year. Enrollment limited.
Prerequisite: 23.333 or equivalent.
- 23.720 Graduate Seminar in English Literature (3)**
An intensive study of selected problems in English literature. (Offered on alternate semesters with 23.730.)
- 23.730 Graduate Seminar in American Literature (3)**
An intensive study of selected problems in American literature. (Offered on alternate semesters with 23.720.)
- 23.797 Master's Thesis Seminar (3-6)**
For M.A. candidates only. Methods and materials of research (3); the preparation of a thesis under the direction of a departmental committee (3).

See also:

Department of Speech Arts. The following courses may be taken for credits in English:

- 67.550 History of Theatre I (3)
67.551 History of Theatre II (3)
67.556 History of the American Theatre (3)
67.560 Dramatic Theory and Criticism (3)

Department of Education:

- 21.345 Children's Literature (3).

Languages and Linguistics

Professors:

JOHN G. FRANK (*Emeritus*)

HUGO J. MUELLER (*Chairman*)

Associate Professors:

VADIM MEDISH (*Associate Chairman*)

RUBERTA M. OLDS (*Emeritus*)

Assistant Professors:

VERA Z. BORKOVEC

EDWARD I. BURKART

MARIE A. CHARBONNEAUX

JESSICA W. GOLDIN

ESTHER HANDLER

MONIQUE S. KLEIN

GRACE S. MANCILL

HENRY M. NOEL

ELENI K. OKTAY

HUGO PINEDA

ROSEMARIE SAAL

OSCAR SALAZAR

BRUNO STEINBRUCKNER

GERTA M. H. URRY

MONIQUE DE JONG WARD

KATHRYN DAY WYATT

ZOE WYTHE

RAFAEL SUPERVIA

Lecturers:

DAVID ASHWORTH

MONIQUE HOVEY

NEIL ANN S. LEVINE

ELISABETH VAN HOUTVEN

REUVEN YALON

EDDIE TOK SENG YO

Instructors:

MARIANO GOWLAND

ZUZEL C. HOLCOMB

Professorial Lecturers:

JULIA BILLINGS

B. KIRK RANKIN, III

UNDERGRADUATE DEGREE

Bachelor of Arts in French, German, Russian, or Spanish.

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non credit)
	Humanities are normally satisfied major and related requirements.	
	Consult department.	(12 hours)
	Science and Mathematics	(11-12 hours)
	Social Science	(12 hours)

Language Requirement Met by requirements for major.

Departmental Requirements Completion of language courses on the elementary and intermediate level. Majors are urged to choose the intensive courses on these levels. Requirements of elementary and intermediate language course work may be waived if high school or other preparation warrants it. In addition a minimum of 27 hours of advanced course work are required, specifically: Linguistic Introduction to Language (3), Intensive Advanced Language (12), Survey of Literature (6), Civilization (3), and Pro-Seminar in Literature (3).

MAJOR COURSES

French:

37.300, 37.425-26, 37.322-23, 37.420 and 37.421

German:

37.300, 37.435-36, 37.332-33, 37.430 and 37.431

Russian:

37.300, 37.445-46, 37.345-46, 37.440 and 37.441

Spanish:

37.300, 37.455-56, 37.352-53, 37.450 and 37.451

RELATED COURSES 12 hours

Advanced literature courses in the major language, or courses in linguistics, or courses in a second foreign language are recommended.

ELECTIVES to complete minimum of 120 hours plus non credit physical education.

DEPARTMENTAL EXAMINATION

An oral examination of approximately one hour's duration before an appointed committee.

Graduate Record Examination is optional.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts in French, German, Russian, or Spanish.

Prerequisite Prerequisite for admission to Master's program in French, German, Russian or Spanish is a Bachelor's degree in that language, or equivalent preparation.

Course Requirements Minimum of 30 hours of approved graduate work, including one Master's Thesis Seminar (6) and one 700-level research seminar (3), or three 700-level research seminars (9 hours). Of the remaining 21 hours, 9-12 must be taken in theoretical or applied linguistics, and 9-12 in the appropriate literature.

Written Comprehensive Examinations Two, including one in the appropriate literature and one in general or in applied linguistics, or in the structure of the foreign language.

Oral Examination An oral examination of approximately one hour's duration on the general field of the thesis (if one is submitted), on general or applied linguistics, and on the appropriate literature. The examination is conducted, at least in part, in the foreign language.

Other Requirements Thesis, unless research seminar alternative is chosen.

Master of Arts in Linguistics

Prerequisite Prerequisite for admission to the Master's program in Linguistics is a Bachelor's degree with a minimum of two years in a foreign language or equivalent preparation.

Course Requirements Minimum of 30 hours of approved graduate work, including 37.797 Master's Thesis Seminar (6) and one 700-level research seminar (3), or three 700-level research seminars (9), or two 700-level research seminars (6) and a case study (3). Of the remaining 21 hours, 15 must be taken in theoretical linguistics and 6 in applied linguistics. Three of the required seminar credits may be earned by taking a 700-level seminar in a foreign language.

Written Comprehensive

Examination Two, including one in general linguistics and one in applied linguistics.

Oral Examination An oral examination of approximately one hour's duration on theoretical and applied linguistics, and in defense of the thesis (if one is submitted).

Other Requirements Thesis, unless research seminar alternative is chosen.

Graduate Comprehensive	37.001	General Linguistics	37.022	German Literature
Examination Fields	37.002	Applied Linguistics	37.023	Russian Literature
	37.011	French Structure	37.024	Spanish Literature
	37.012	German Structure	37.025	Latin American Literature
	37.013	Russian Structure		(37.021-025 with emphasis upon
	37.014	Spanish Structure		particular authors, movements,
	37.021	French Literature		or literary forms.)

UNDERGRADUATE COURSES

Academic credit may not be earned for language courses below the level already completed by the student elsewhere, including high school.

With special permission from the Chairman of the Department of Languages and Linguistics, a language major may take an Intensive course for three credit hours per semester, provided he has successfully completed a non-intensive course at the same level.

Credit is given for the first semester of an elementary of intermediate language course only upon the successful completion of the second semester. In all language courses, students are expected to do individual language laboratory work outside of class.

37.175 Arabic, Intensive Elementary I (6)

Emphasis on audio-lingual skills. Drills on the main features of Classical Arabic structure. Inductive presentation of grammar. Active vocabulary. Introduction to the writing system.

37.176 Arabic, Intensive Elementary II (6)

Continuation of 37.175.

37.185 Chinese, Intensive Elementary I (6)

Emphasis on audio-lingual skills. Drills on the main features of Mandarin structure. Inductive presentation of grammar. Active vocabulary. Introduction to the writing system.

- 37.186 Chinese, Intensive Elementary II (6)**
Continuation of 37.185.
- 37.120 French, Elementary I (3)**
Emphasis on audio-lingual skills. Drills on the main features of French structure. Inductive presentation of grammar. Basic vocabulary. Reading and writing as auxiliary skills.
- 37.121 French, Elementary II (3)**
Continuation of 37.120.
- 37.125 French, Intensive Elementary I (6)**
Same course content as 37.120, supplemented by copious drills. Emphasis on pronunciation and fluency in common speech situations. Offered especially for French majors.
- 37.126 French, Intensive Elementary II (6)**
Continuation of 37.125.
- 37.220 French, Intermediate I (3)**
Audio-lingual skills as well as reading and writing. Text material is focused on French cultural patterns.
Prerequisite: One year college French or equivalent.
- 37.221 French, Intermediate II (3)**
Continuation of 37.220.
- 37.225 French, Intensive Intermediate I (6)**
Offered especially for French majors. Same course content as 37.220 supplemented by copious drills. Discussions.
Prerequisite: One year college French, or equivalent.
- 37.226 French, Intensive Intermediate II (6)**
Continuation of 37.225.
- 37.427 French, Advanced I (3)**
Audio-lingual skills as well as reading and writing. Discussions. Systematic exercises on style. Idioms. Semantic problems.
Prerequisite: Two years college French, or equivalent.
- 37.428 French, Advanced II (3)**
Continuation of 37.427.
- 37.425 French, Intensive Advanced I (6)**
Designed especially for French majors. Same course content as 37.427, supplemented by copious drills. Discussions.
Prerequisite: Two years college French or equivalent.
- 37.426 French, Intensive Advanced II (6)**
Continuation of 37.425.
- 37.322 French, Survey of Literature I (3)**
French literature from its beginning to the Romantic period. Reading of texts from *Chanson de Roland* to Voltaire and Rousseau.
Prerequisite: Two years college French or equivalent.
- 37.323 French, Survey of Literature II (3)**
French literature from Romanticism to the contemporary period. Readings from Chateaubriand to the New Novel.
Prerequisite: 37.322.
- 37.420 French Civilization (3)**
A survey of French civilization from Charlemagne to the present time. The course is conducted in French.
Prerequisite: Three years college French or equivalent.
- 37.421 French, Pro-Seminar in Literature (3)**
This course is conducted as a discussion group with emphasis on individual

problems. Reports on assigned topics. Critical discussions. The course is conducted in French.

Prerequisite: 37.323 and 37.420.

37.003 German, Reading for Research (0)

Reading and translation of selected German texts, especially for preparing graduate degree candidates for language tool examination.

Prerequisite: One year college German or equivalent. Tuition Part-Time Students, see current *Schedule of Classes Bulletin*.

37.130 German, Elementary I (3)

Emphasis on audio-lingual skills. Drills on the main features of German structure. Inductive presentation of grammar. Basic vocabulary. Reading and writing as auxiliary skills.

37.131 German, Elementary II (3)

Continuation of 37.130.

37.135 German, Intensive Elementary I (6)

Same course content as 37.130, supplemented by copious drills. Emphasis on pronunciation and fluency in common speech situations. Offered especially for German majors.

37.136 German, Intensive Elementary II (6)

Continuation of 37.135.

37.230 German, Intermediate I (3)

Audio-lingual skills as well as reading and writing. Text material is focused on German cultural patterns.

Prerequisite: One year college German, or equivalent.

37.231 German, Intermediate II (3)

Continuation of 37.230.

37.235 German, Intensive Intermediate I (6)

Offered especially for German majors. Same course content as 37.230, supplemented by copious drills. Discussions.

Prerequisite: One year college German or equivalent.

37.236 German, Intensive Intermediate II (6)

Continuation of 37.235.

37.437 German, Advanced I (3)

Audio-lingual skills as well as reading and writing. Discussions. Systematic exercises on style. Idioms. Semantic problems.

Prerequisite: Two years college German or equivalent.

37.438 German, Advanced II (3)

Continuation of 37.437.

37.435 German, Intensive Advanced I (6)

Designed especially for German majors. Same course content as 37.437, supplemented by copious drills. Discussions.

Prerequisite: Two years college German or equivalent.

37.436 German, Intensive Advanced II (6)

Continuation of 37.435.

37.332 German, Survey of Literature I (3)

German literature from the Old High German period through the classical period to 19th Century Romanticism.

Prerequisite: Two years college German or equivalent.

37.333 German, Survey of Literature II (3)

Movements in German thought in the 19th and 20th centuries. Selected writings.

Prerequisite: 37.332.

- 37.430 German Civilization (3)**
A survey of German civilization from the beginning of the Christian era to the present time. The course is conducted in German.
Prerequisite: Three years college German or equivalent.
- 37.431 German, Pro-Seminar in Literature (3)**
This course is conducted as a discussion group with emphasis on individual problems. Reports on assigned topics. Critical discussions. The course is conducted in German.
Prerequisites: 37.333 and 37.430.
- 37.190 Greek, Elementary Ancient I (3)**
Presentation and drill of Greek structure. Basic vocabulary. Development of reading knowledge. Introduction to the position of Greek within the Indo-European family of languages.
- 37.191 Greek, Elementary Ancient II (3)**
Continuation of 37.190.
- 37.290 Greek, Intermediate I (3)**
Study of forms and syntax with oral and written drills. Work with tapes in the language laboratory. Readings from classical authors (Plato, Homer).
Prerequisite: One year college Greek, or equivalent.
- 37.291 Greek, Intermediate II (3)**
Continuation of 37.290.
- 37.195 Hindi, Intensive Elementary I (6)**
Emphasis on audio-lingual skills. Drill on the main features of Hindi structure. Inductive presentation of grammar. Active vocabulary. Introduction to the writing system.
- 37.196 Hindi, Intensive Elementary II (6)**
Continuation of 37.195.
- 37.295 Hindi, Intensive Intermediate I (6)**
Emphasis on further development of audio-lingual skills and on the main features of Hindi structure. Further development of reading and writing skills, and introduction to the culture.
Prerequisite: One year college Hindi or equivalent.
- 37.296 Hindi, Intensive Intermediate II (6)**
Continuation of 37.295.
- 37.115 Indonesian, Intensive Elementary I (6)**
Emphasis on audio-lingual skills. Drill on the main features of Indonesian structure. Inductive presentation of grammar. Active vocabulary. Introduction to reading and writing.
- 37.116 Indonesian, Intensive Elementary II (6)**
Continuation of 37.115.
- 37.215 Indonesian, Intensive Intermediate I (6)**
Emphasis on mastering the structure of the language and on building reading and writing skills. Audio-lingual skills. reading, writing, introduction to the culture.
Prerequisite: One year of college Indonesian or equivalent.
- 37.216 Indonesian, Intensive Intermediate II (6)**
Continuation of 37.215.
- 37.165 Japanese, Intensive Elementary I (6)**
Emphasis on audio-lingual skills. Drills on the main features of Japanese structure. Inductive presentation of grammar. Active vocabulary. Introduction to the writing system.
- 37.166 Japanese, Intensive Elementary II (6)**
Continuation of 37.165.

- 37.265 Japanese, Intensive Intermediate I (6)**
Emphasis on mastering the structure of the language and on attaining a knowledge of the writing system. Audio-lingual skills, reading and writing practice. Text materials focused on Japanese structural and cultural patterns. *Prerequisite:* One year of college Japanese or equivalent.
- 37.266 Japanese, Intensive Intermediate II (6)**
Continuation of 37.265.
- 37.300 Language, Introduction to (3)**
The nature of language. The field of linguistics. Languages of the world. Linguistic terminology.
- 37.192 Latin, Elementary I (3)**
Presentation and drill of Latin structure. Basic vocabulary. Development of reading knowledge. Introduction to the position of Latin within the Indo-European family of languages.
- 37.193 Latin, Elementary II (3)**
Continuation of 37.192.
- 37.292 Latin, Intermediate I (3)**
Study of forms and syntax with oral and written drills. Work with tapes in the language laboratory. Readings from classical authors (Caesar, Tacitus, Ovidius, Virgil and others). *Prerequisite:* One year college Latin or equivalent.
- 37.293 Latin Intermediate II (3)**
Continuation of 37.292.
- 37.004 Russian, Reading for Research (0)**
Reading and translation of selected Russian texts, especially for preparing graduate degree candidates for language tool examination. *Prerequisite:* One year college Russian or equivalent. Tuition Part-Time Students, see current *Schedule of Classes Bulletin*.
- 37.140 Russian, Elementary I (3)**
Emphasis on audio-lingual skills. Drills on the main features of Russian structure. Inductive presentation of grammar. Basic vocabulary. Reading and writing as auxiliary skills.
- 37.141 Russian, Elementary II (3)**
Continuation of 37.140.
- 37.145 Russian, Intensive Elementary I (6)**
Same course content as 37.140, supplemented by copious drills. Emphasis on pronunciation and fluency in common speech situations. Offered especially for Russian majors.
- 37.146 Russian, Intensive Elementary II (6)**
Continuation of 37.145.
- 37.240 Russian, Intermediate I (3)**
Audio-lingual skills as well as reading and writing. Text material is focused on Russian cultural patterns. *Prerequisite:* One year college Russian or equivalent.
- 37.241 Russian, Intermediate II (3)**
Continuation of 37.240.
- 37.245 Russian, Intensive Intermediate I (6)**
Offered especially for Russian majors. Same course content as 37.240, supplemented by copious drills. Discussions. *Prerequisite:* One year college Russian or equivalent.
- 37.246 Russian, Intensive Intermediate II (6)**
Continuation of 37.245.

- 37.447 Russian, Advanced I (3)**
Audio-lingual skills as well as reading and writing. Discussions. Systematic exercises on style. Idioms. Semantic problems.
Prerequisite: Two years college Russian or equivalent.
- 37.448 Russian, Advanced II (3)**
Continuation of 37.447.
- 37.445 Russian, Intensive Advanced I (6)**
Designed especially for Russian majors. Same course content as 37.447, supplemented by copious drills. Discussions.
Prerequisite: Two years college Russian or equivalent.
- 37.446 Russian, Intensive Advanced II (6)**
Continuation of 37.445.
- 37.345 Russian, Survey of Literature I (3)**
Russian literature from the Kiev period to Dostoevsky.
Prerequisite: Two years college Russian or equivalent.
- 37.346 Russian, Survey of Literature II (3)**
Russian literature from Post-Dostoevsky Decadence to the present.
Prerequisite: 37.345.
- 37.440 Russian Civilization (3)**
A survey of Russian civilization from the Kiev Rus period to the present time. The course is conducted in Russian.
Prerequisite: Three years college Russian or equivalent.
- 37.441 Russian, Pro-Seminar in Literature (3)**
This course is conducted as a discussion group with emphasis on individual problems. Reports on assigned topics. Critical discussions. The course is conducted in Russian.
Prerequisite: 37.346 and 37.440.
- 37.150 Spanish, Elementary I (3)**
Emphasis on audio-lingual skills. Drills on the main features of Spanish structure. Inductive presentation of grammar. Basic vocabulary. Reading and writing as auxiliary skills.
- 37.151 Spanish, Elementary II (3)**
Continuation of 37.150.
- 37.155 Spanish, Intensive Elementary I (6)**
Same course content as 37.150, supplemented by copious drills. Emphasis on pronunciation and fluency in common speech situations. Offered especially for Spanish majors.
- 37.156 Spanish, Intensive Elementary II (6)**
Continuation of 37.155.
- 37.250 Spanish, Intermediate I (3)**
Audio-lingual skills as well as reading and writing. Text material is focused on Spanish and Spanish-American cultural patterns.
Prerequisite: One year college Spanish or equivalent.
- 37.251 Spanish, Intermediate II (3)**
Continuation of 37.250.
- 37.255 Spanish, Intensive Intermediate I (6)**
Offered especially for Spanish majors. Same course content as 37.250, supplemented by copious drills. Discussions.
Prerequisite: One year college Spanish or equivalent.
- 37.256 Spanish, Intensive Intermediate II (6)**
Continuation of 37.255.
- 37.457 Spanish, Advanced I (3)**
Audio-lingual skills as well as reading and writing. Discussions. Systematic

exercises on style. Idioms. Semantic problems.

Prerequisite: Two years of college Spanish or equivalent.

37.458 Spanish, Advanced II (3)

Continuation of 37.457.

37.455 Spanish, Intensive Advanced I (6)

Designed especially for Spanish majors. Same course content as 37.457, supplemented by copious drills. Discussions.

Prerequisite: Two years college Spanish or equivalent.

37.456 Spanish, Intensive Advanced II (6)

Continuation of 37.455.

37.352 Spanish, Survey of Literature I (3)

Spanish literature from the epic period to the 18th century. Readings from *Poema del Cid* through *Siglo de Oro*.

Prerequisite: Two years college Spanish or equivalent.

37.353 Spanish, Survey of Literature II (3)

From Romanticism to the present. Reading from Duque de Rivas and Espronceda to Jiménez.

Prerequisite: 37.352.

37.450 Hispanic Civilization (3)

A survey of Hispanic Civilization from Roman times to the present. The course is conducted in Spanish.

Prerequisite: Three years college Spanish or equivalent.

37.451 Spanish, Pro-Seminar in Literature (3)

This course is conducted as a discussion group with emphasis on individual problems. Reports on assigned topics. Critical discussions. The course is conducted in Spanish.

Prerequisite: 37.352 and 37.353.

37.105 Thai, Intensive Elementary I (6)

Emphasis on audio-lingual skills. Drills on the main features of Thai structure. Inductive presentation of grammar. Active vocabulary. Introduction to the writing system.

37.106 Thai, Intensive Elementary II (6)

Continuation of 37.105.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600 and 700-level courses are open only to graduate students. Prerequisite for admission to all advanced courses: permission of the instructor unless otherwise specified.)

37.520 The French Renaissance (3)

Renaissance and humanistic movement in France in the 16th century. Rabelais, the *Pléiade*, Ronsard, Montaigne.

Prerequisite: Permission of the instructor.

37.521 Eighteenth Century France: Men and Ideas (3)

Attitudes and ideas of the age of enlightenment as reflected in Montesquieu, Diderot, the Encyclopedists, Voltaire, and Rousseau.

Prerequisite: Permission of the instructor.

37.522 French Romanticism (3)

Development of the Romantic movement in early 19th century French literature. Analysis of sentiments of the romanticists.

Prerequisite: Permission of the instructor.

- 37.523 French Realism (3)**
19th century French literature from decline of romanticism to turn of century. Periods of expression known as realism, naturalism, and symbolism.
Prerequisite: Permission of the instructor.
- 37.524 Contemporary French Theater (3)**
Representative plays of Paul Claudel, Jules Romains, Jean Jacques Bernard, Jean Giraudoux, Henri de Montherland, Jean Paul Sartre, Jean Anouilh, and Albert Camus.
Prerequisite: Permission of the instructor.
- 37.525 Contemporary French Novel (3)**
Major trends in the French novel since 1919. J. Romains, Mauriac, Duhamel, Gide, Malraux, Giraudoux, du Gard, Fournier, Proust, Sartre, and Camus.
Prerequisite: Permission of the instructor.
- 37.526 French Structure (3)**
A contemporary and historical analysis of the phonology, morphology, and syntax of French. The course is conducted in English.
Prerequisite: Permission of the instructor.
- 37.702 Seminar in Contemporary French Literature I (3)**
Reports and critical discussion of research papers on 20th century French literature. The seminar is conducted entirely in French.
Prerequisite: Permission of the instructor.
- 37.703 Seminar in Contemporary French Literature II (3)**
Continuation of 37.702.
- 37.530 Nineteenth Century German Literature (3)**
From Romanticism to Realism and subsequent developments to the beginning of World War I. Selected representatives such as Heine, Keller, Storm, Stifter, Fontane, the Naturalists.
Prerequisite: Permission of the instructor.
- 37.531 Lessing (3)**
Lessing as representative of 18th century thought in Germany. Foundations of modern German drama. Preparation for work of Kant, Nature of "Aufklärung". Humanistic ideals.
Prerequisite: Permission of the instructor.
- 37.532 Goethe (3)**
Life, time, and representative works of Goethe. Reading of *Faust*.
Prerequisite: Permission of the instructor.
- 37.533 Schiller (3)**
Life, time, and representative works of Schiller. His ideas as expressed in drama. Moral and artistic standards.
Prerequisite: Permission of the instructor.
- 37.534 Contemporary German Novel (3)**
Post-war German novels. Literary interpretation of novels by Grass, Johnson, Frisch, Boll, and others.
Prerequisite: Permission of the instructor.
- 37.630 Topics, Motifs and Conventions in German Literature (3)**
Understanding and application of modern theoretical aspects reflecting present day thinking in German literary criticism.
Prerequisite: Permission of the instructor.
- 37.631 German Literature in the Middle Ages (3)**
Medieval literature in Germany from approximately 900 to 1400 A.D. Covers a period vital to the understanding of German intellectual development.
Prerequisite: Permission of the instructor.
- 37.632 History of the German Language (3)**
A complete survey of the historic development of the German language.

The student is introduced to the scholarly methods applied in diachronic linguistics.

Prerequisite: Permission of the instructor.

37.633 German Structure and Problems in Teaching German (3)

Problems in a descriptive analysis of the German structure, and the impact of new linguistic findings on the practice of teaching German.

Prerequisite: Permission of the instructor.

37.700 Seminar in Contemporary German Literature I (3)

Reports and critical discussion of research papers on 20th century German literature. The seminar is conducted entirely in German.

Prerequisite: Permission of the instructor.

37.701 Seminar in Contemporary German Literature II (3)

Continuation of 37.700.

37.500 Principles of Linguistics I (3)

Introduction to the scientific study of language, with the emphasis on structural linguistics. Attitudes of the linguistic scientist. Readings, problems, and class discussions.

Prerequisite: Permission of the instructor.

37.501 Principles of Linguistics II (3)

Introduction to the study of language change, the classification of languages, and linguistic reconstruction. Readings, problems, and class discussions.

Prerequisite: Permission of the instructor.

37.502 Linguistic Structure I: Phonetics and Phonemics (3)

Phonetics and phonemics. Techniques of describing speech sounds in terms of articulatory movements and formulas. Practice in hearing and transcribing phonetic sounds, using tape recordings. Basic premises underlying phonemic analysis and practical procedures for arriving at the phonemes of a language.

Prerequisite: Permission of the instructor.

37.503 Linguistic Structure II: Morphology and Syntax (3)

Morphology and syntax. The identification of morphemes; morphophonemics; morpheme classes and distribution; problems in the classification and description of morphological data. Componential analysis of utterances; form classes; immediate constituents. Introduction to string constituent analysis and transformations.

Prerequisite: Permission of the instructor.

37.505 History of Linguistics (3)

Linguistic theories from the Greeks to modern times. Great linguists and their schools of thought. Development of American linguistics.

Prerequisite: Permission of the instructor.

37.507 Applied Linguistics: The Methodology of Foreign Language Teaching (3)

Principles underlying the structural method of language teaching. Application of linguistics in the preparation of teaching materials. Planning of courses. Audio-visual aids.

Prerequisite: Permission of the instructor.

37.508 Teaching English as a Foreign Language (3)

Methods of teaching English as a foreign language; development of teaching materials; discussion of textbooks; lesson planning; problems of the foreign student. A considerable portion of the course is devoted to practical work: writing materials and presenting them orally for class critique. Students visit actual EFL classes.

Prerequisite: Permission of the instructor.

- 37.595 Linguistic Introduction to Sanskrit I (3)**
Primary stress on learning the linguistics structure of Sanskrit and on developing reading skill. A general introduction regarding the position of Sanskrit within the Indo-European family of languages. Historical development of Sanskrit.
Prerequisite: Permission of the instructor.
- 37.596 Linguistic Introduction to Sanskrit II (3)**
Continuation of 37.595.
- 37.600 Linguistic Structure III: Theories of Syntax (3)**
Schools of syntactic analysis. Introduction to Tagmemics, Phrase Structure, Dependency Theory and Transformations (Chomsky-school). Comparison of these types of analysis with one another and with IC analysis and Transformations (Harris-school), as taught in Linguistics Structure II. Additional treatment of Transformations (Harris-school).
Prerequisite: Permission of the instructor.
- 37.605 Semantics (3)**
History of semantic theory. Semantic changes, reflecting cultural change. Ambiguity of meaning. Metaphors. Synonymy. Etymologies. Word-field theory. Structural semantics versus historical semantics.
Prerequisite: Permission of the instructor.
- 37.710 Seminar in Linguistics (3)**
No fixed subject content. Reports and critical discussions on various theoretical and practical problems in the scientific study of language, methodology in linguistic research, and other pertinent linguistic subjects. May be repeated for credit.
Prerequisite: Permission of the instructor.
- 37.540 Pushkin (3)**
The life and work of Pushkin. Reading and interpretation of some of his works, with particular emphasis on *Eugene Onegin*.
Prerequisite: Permission of the instructor.
- 37.541 Dostoevsky (3)**
The life and work of Dostoevsky. Reading and interpretation of some of his works, with particular reference to *Crime and Punishment* and *The Devils*.
Prerequisite: Permission of the instructor.
- 37.542 Tolstoy (3)**
The life and work of Leo Tolstoy. Critical study of *Anna Karenina*. Tolstoy's social and ethical ideas in relation to his contemporary world.
Prerequisite: Permission of the instructor.
- 37.543 Russian Drama (3)**
Development of Russian drama from its beginnings through the Soviet period. Evaluation of representative plays.
Prerequisite: Permission of the instructor.
- 37.548 Advanced Russian for Teachers I (3)**
Brush-up on language skills. Methods of teaching Russian as a foreign language. Development of teaching materials. Lesson planning.
Prerequisite: Permission of the instructor.
- 37.549 Advanced Russian for Teachers II (3)**
Latest developments of the Russian language. Samples of contemporary literature. Recent cultural trends.
Prerequisite: Permission of the instructor.
- 37.706 Seminar in Russian Literature I (3)**
Reports and critical discussion of research papers on Russian literature. The seminar is conducted entirely in Russian.
Prerequisite: Permission of the instructor.

- 37.707 Seminar in Russian Literature II (3)**
Continuation of 37.706.
- 37.550 Novel of the Golden Age (3)**
The development of the novel during the Golden Age with special emphasis on *Don Quixote*.
Prerequisite: Permission of the instructor.
- 37.551 Spanish, Nineteenth Century Novel (3)**
Trends of the novel from romanticism to the generation of '98. Alarcón, Valera, Pereda, Pardo Bázan, Pérez, Galdós and others.
Prerequisite: Permission of the instructor.
- 37.552 Spanish American Literature I (3)**
Literary and historical figures from the chronicles to the 19th century.
Prerequisite: Permission of the instructor.
- 37.553 Spanish American Literature II (3)**
From the development of the modernist movement to contemporary literature.
Prerequisite: Permission of the instructor.
- 37.556 Spanish Structure (3)**
A contemporary and historical analysis of the phonology, morphology, and syntax of Spanish. The course is conducted in English.
Prerequisite: Permission of the instructor.
- 37.558 Advanced Spanish for Teachers I (3)**
Brush-up on language skills. Methods of teaching Spanish as a foreign language. Development of teaching materials. Lesson planning.
Prerequisite: Permission of the instructor.
- 37.559 Advanced Spanish for Teachers II (3)**
Latest developments of the Spanish language. Samples of contemporary literature. Recent cultural trends.
Prerequisite: Permission of the instructor.
- 37.704 Seminar in Contemporary Spanish and Latin-American Literature I (3)**
Reports and critical discussion of research papers on modern Spanish and Latin-American literature. The seminar is conducted entirely in Spanish.
Prerequisite: Permission of the instructor.
- 37.705 Seminar in Contemporary Spanish and Latin-American Literature II (3)**
Continuation of 37.704.
- 37.797 Master's Thesis Seminar (3-6)**

Philosophy and Religion

Professor:

HAROLD A. DURFEE (*Chairman*)

Associate Professors:

ROBERT C. LESTER

THEODORE R. ROSCHE

ROGER T. SIMONDS

Assistant Professors:

TERRELL W. BYNUM

CHARLEY D. HARDWICK

DAVID F. T. RODIER

WILLIAM M. WIEBENGA

Instructor:

JAN K. LUDWIG

Professorial Lecturers:

ISAAC FRANCK

CHRISTOPHER B. GARNETT, JR.

Lecturers:

MARION F. HOUSTOUN

ALICE P. LINDSAY

EUGENE J. LIPMAN

UNDERGRADUATE DEGREE

Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities are normally satisfied by major and related requirements.	
	Consult department.	(12 hours)
	Science and Mathematics	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. French, German, Greek or Latin. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Departmental PHILOSOPHY

Requirements MAJOR COURSES (30 hours)

Students majoring in Philosophy complete 47.100 Logic and Scientific Method, and 27 hours in Philosophy at the 300-level and above, including 47.300-301 History of Philosophy.

RELATED COURSES (minor department) (12 hours)

Courses at the 300 level and above in one department.

RELIGION

MAJOR COURSES (33 hours)

Students majoring in Religion complete 47.150 Introduction to the Old Testament and 47.170 Introduction to the New Testament, 24 additional hours in Religion, and 3 hours of Philosophy.

RELATED COURSES (minor department) (12 hours)

Courses at the 300 level and above in one department.

PHILOSOPHY AND RELIGION

MAJOR COURSES (36 hours)

Students completing a combined major in Philosophy and Religion complete 47.150 Introduction to the Old Testament and 47.170 Introduction to the New Testament 47.300-301 History of Philosophy, and 24 additional hours in Philosophy and Religion chosen from 300-level courses and above. These 24 hours must include 9 hours in both Philosophy and Religion.

RELATED COURSES (minor department) (12 hours)

Courses at the 300-level and above in one department.

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts in Philosophy

Course Requirements Minimum of 30 hours of approved graduate work including 47.797 Master's Thesis Seminar (6).

Written Comprehensive Examination One eight hour examination in Philosophy (administered in two days, two hours each day).

Graduate Comprehensive PHILOSOPHY

Examination Fields 47.01A and 47.01B Philosophy

Other Requirements Proficiency examination in French or German. Thesis and oral defense of thesis.

Master of Arts in Religion

Course Requirements Minimum of 30 hours of approved graduate work, including 47.797 Master's Thesis Seminar (6).

Written Comprehensive Examinations Three, including one in the History of Religion with special emphasis upon a selected non-Christian religion, one in the English Bible with special emphasis upon a selected author, and one in the History of Christian Thought with special emphasis upon a selected classical figure, or a related field.

Other Requirements Proficiency examination in French, German, Greek, or Hebrew. Thesis and oral defense of thesis.

Graduate Comprehensive RELIGION

Examination Fields 47.003 History of Religion (with special emphasis upon a selected non-Christian religion)

- 47.004 English Bible (with special emphasis upon a selected author)
 47.021 History of Christian Thought (with special emphasis upon a selected classical figure in the same)

UNDERGRADUATE COURSES

Philosophy

- 47.100 Logic and the Scientific Method (3)**
 Introduction to the nature of valid inference and its relation to the scientific method. Principles of inductive and deductive reasoning.
- 47.101 Introduction to Philosophy (3)**
 Questions man has asked about himself, the world, and the origin, purpose and destiny of life; representative answers given by the great thinkers.
- 47.102 Philosophies Men Live By (3)**
 A study of selected philosophers in the history of western thought, and their relevance to human existence.
- 47.300 History of Philosophy: Ancient and Medieval (3)**
 Historical survey of representative philosophers from the early Greeks through the Middle Ages. Not open to Freshmen.
- 47.301 History of Philosophy: Modern (3)**
 Philosophers from the Renaissance to Hegel. Not open to Freshmen.
- 47.302 History of Philosophy: Recent (3)**
 Philosophers from Hegel to contemporary existentialism and linguistic analysis. Not open to Freshmen.
- 47.303 American Philosophy (3)**
 Backgrounds and substance of American philosophy since colonial times. Role of philosophical ideas. European and indigenous, in the growth of the American culture.
Prerequisite: three hours of philosophy.
- 47.305 Philosophies of the East (3)**
 Systems of thought in the East from ancient to modern times. Special emphasis upon philosophies of Confucianism, Taoism, Hinduism, and Buddhism.
- 47.310 Ethics (3)**
 Inquiry into the principles of moral evaluation, their relation to factual judgment, and individual and social behavior. Evaluation of traditional schools and theories of ethics.
Prerequisite: three hours of philosophy.
- 47.311 Aesthetics (3)**
 Nature of beauty and the relation of the philosophy of the beautiful to the fine arts and to human experience.
Prerequisite: three hours of philosophy.

Religion

BIBLICAL STUDY

- 47.150 Introduction to the Old Testament (3)**
 Emphasis upon the substantive content of the Bible. Special attention to the historical method and the canon of Biblical interpretation.
- 47.170 Introduction to the New Testament (3)**
 A literary, historical and theological study of the New Testament with particular attention upon Jesus, Paul and the development of the Christian movement.

47.180 Introduction to Religious Thought (3)

Introduction to the nature of religion and essential religious concepts.

CHRISTIAN THOUGHT

47.370 History of Christian Thought I (3)

Survey of Christian thought from apostolic times through medieval period to Erasmus. Special attention to the rise of orthodoxy and heresy, in representative thinkers and councils.

47.371 History of Christian Thought II (3)

Analysis of the thought of the Protestant and Roman Catholic Reformations of the 16th century. The development and place of Christian ideas in the rise of modern secular culture.

47.374 Christian Ethics (3)

Study of the major types and issues of Christian ethical thought.

Prerequisite: three hours of philosophy or religion.

47.375 Studies in Major Theologians (3)

Studies of selected major religious thinkers. For fall 1967-68, Radical Theology and the Death of God Movement. For spring 1967-68, Contemporary Religious Thought.

Prerequisite: three hours of religion or philosophy.

47.380 Psychology of Religion (3)

Psychological appraisal of religious experience, prayer, worship, belief, interpersonal relationships, religious practices and behavior.

HISTORY OF RELIGION

47.383 Comparative Religion (3)

Synoptic study of the world's living religions, their founders, literature, teachings and values.

47.394 Post-Biblical Judaism (3)

The development of Judaism from the Maccabean period to the present. Selected philosophical, theological, institutional movements in Jewish faith and practice.

Prerequisite: 47.150.

3.430 Primitive Religions (3)

Varieties of religious experiences and expressions exclusive of the great world religions. Role of religion in influencing behavior and in integrating particular societies, cultures.

Prerequisite: 3.201.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 700-level courses are open only to graduate students.)

Philosophy

47.500 Studies in Major Philosophers (3)

Reading and analysis of leading historical philosophers. For fall 1967-68, Plato; Kant. For spring 1967-68, Aristotle; Hegel.

Prerequisite: nine hours of philosophy.

47.502 Studies in Recent Philosophers (3)

Reading and analysis of selected philosophers since Hegel as the background of contemporary philosophical movements. For spring 1967-68, Husserl, Kierkegaard.

Prerequisite: nine hours of philosophy.

- 47.504 Contemporary Philosophy (3)**
Study of a leading contemporary movement in philosophy. For fall 1967-68, Naturalism.
Prerequisite: nine hours of philosophy.
- 29.504 Philosophy of History (3)**
Contemporary issues in the philosophy of history, with special attention to problems of meaning and structure in the historical process, considered in the light of their historical roots.
Prerequisite: three hours of philosophy.
- 47.506 Selected Topics in Philosophical Analysis (3)**
A study of selected issues in philosophy. For fall 1967-68, Philosophy of Mind.
Prerequisite: nine hours of philosophy.
- 47.508 Philosophy of Religion (3)**
Study of a leading contemporary movement in philosophy of religion.
Prerequisite: nine hours of philosophy.
- 47.520 Symbolic Logic (3)**
An analysis of the development and use of symbolism in modern logic and its relevance to the clarification of logical problems.
Prerequisite: 47.100.
- 47.521 Philosophy of Science (3)**
A study of the relationship of modern philosophy to the findings of modern science.
Prerequisite: 47.100.
- 47.530 Social Philosophy (3)**
A study of the leading proposals regarding the philosophical foundation of modern culture and society.
Prerequisite: three hours of philosophy.
- 47.702 Graduate Seminar in Philosophy (3)**
An intensive study of selected philosophical problems.
Prerequisite: twelve hours of philosophy.
- I. History of Philosophy VI. Value Theory
II. Metaphysics VII. Philosophy of Religion
III. Logic VIII. Social Philosophy
IV. Epistemology IX. Eastern Philosophy
V. Philosophy of Science
- For fall 1967-68, Logic: Logical Atomism. For spring 1967-68, Logic: Knowledge and Belief.
- 47.797 Master's Thesis Seminar (3-6)**
Directed research of M.A. thesis proposals.

Religion

- 47.550 Studies in Non-Christian Religions (3)**
A study of the theology and literature of non-Christian religious movements. For fall 1967-68, Islam.
For spring 1967-68, Confucianism, Taoism.
Prerequisite: 47.305 or 47.383.
- 47.560 Selected Biblical Studies (3)**
Study of selected topics in Biblical literature. For fall 1967-68, The Prophetic Movement.
Prerequisite: 47.150.
For spring 1967-68, First Century Christianity.
Prerequisite: 47.170.
- 47.797 Master's Thesis Seminar (3-6)**
Directed research of M.A. thesis proposals.

DIVISION OF NATURAL SCIENCES AND MATHEMATICS

Biology

Professors:

EDWARD J. BREYER
SUMNER O. BURHOE
MARTHA C. SAGER

Associate Professors:

PAUL R. CURTIS
FALCONER SMITH (*Chairman*)

Assistant Professors:

RICHARD R. ANDERSON
EDDIE D. LEACH
ROBERT L. STRAUTZ

Adjunct Professors:

OSCAR B. HUNTER
JOSEPH C. HWANG

*HERBERT F. SEVERSMITH
HELEN STATTIS

Professorial Lecturers:

NELLIE BERING
JOSEPH V. MICHALSKI
ROBERT G. WILLIAMSON

* Deceased

UNDERGRADUATE DEGREE Bachelor of Science, Bachelor of Science emphasis Medical Technology**

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and mathematics are normally satisfied by major and related re- quirements. Consult department.	(12 hours)
	Social Science	(12 hours)

Language Requirement See page 53

Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Recommended languages: French, German or Russian.

Departmental	MAJOR COURSES	(40 hours)
Requirements	9.110 General Biology I (4)	
	9.111 General Biology II (4)	
	9.304 Comparative Anatomy I (4)	
	9.305 Comparative Anatomy II (4)	
	9.332 Cell Physiology (4)	
	9.356 Genetics (4), and 16 additional hours	

**Students interested in Medical Technology should consult Department for curriculum requirements.

RELATED COURSES (26 hours)

15.110 and 15.111 General Chemistry I and II (8)
15.310, 15.311, 15.320, 15.321 Organic Chemistry I and II (10)
51.210 and 51.211 Elements of General Physics I and II (6)
51.222 and 51.223 General Physics Laboratory I and II (2)

TOOL COURSES (6 hours)

41.110 and 41.111 Fundamentals of Mathematics I and II (6).

Electives To complete the minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult department offices for the latest information.)

Master of Science

Course Requirements Minimum of 30 hours of approved graduate work, including 15.568 Physiological Chemistry (4) and 9.797 Master's Thesis Research (6) and Graduate Seminar.

Written Comprehensive

Examinations Two, selected from the fields listed below.

Other Requirements Thesis and oral defense of thesis.

Other Graduate Degrees See page 125 for information concerning requirements for the Master of Science in Science Teaching.

Graduate Comprehensive	9.001 Microbiology (Bacteriology)	9.004 Physiology
Examination Fields	9.002 Plant Sciences (Botany)	9.005 Zoology
	9.003 Developmental Biology (Embryology and Genetics)	

UNDERGRADUATE COURSES

9.100 Human Biology (3)

Nature of living organisms and associated biological principles in relation to man. Demonstrations and televised lectures; dialogue participation optional. Three hours of lecture.

9.110-9.111 General Biology I and II (4, 4)

A two semester course to be taken in sequence. First semester, General Biology I, the chemical background of biological principles; the utilization of these principles in the organization and maintenance of higher plants. Second Semester, General Biology II, the utilization of these biological principles in animal physiology; the genetic and reproduction mechanisms of biological systems. Two hours of lecture, four hours of laboratory.

9.304-9.305 Comparative Anatomy I and II (4, 4)

A two semester course to be taken in sequence. Inclusive program of Morphology of the living world, to include anatomy of the bacteria; the plant taxa; the invertebrates; the vertebrates. Two hours of lecture, four hours of laboratory.

Prerequisite: 9.110 and 9.111.

9.321 Plant Physiology (4)

A survey of general physiological activities of plants. Two hours of lecture, four hours of laboratory.

Prerequisite: 9.332.

9.330-9.331 Human Anatomy and Physiology I and II (4, 4)

A two semester course, to be taken in sequence. Morphologic and functional studies of mammalian systems with special reference to man; directed toward an understanding of the relationship between normal (and abnormal) function and homeostasis. Laboratory assignments to demonstrate these physiologic principles. Two hours of lecture and four hours of laboratory. *Prerequisites:* 9.110 and 9.111, at least one semester of chemistry, and permission of Department Chairman.

9.332 Cell Physiology (4)

Biological principles are reexamined through physiological studies of selected microorganisms, animal and plant cells. Two hours of lecture, four hours of laboratory.

Prerequisites: 9.110, 9.111, 9.304 and 9.305, and one year of Organic Chemistry.

9.335 Animal Physiology (4)

The properties and physiological processes common to all animals, such as protoplasmic organization, permeability, metabolism, movement, reproduction, and cell division. Two hours of lecture, four hours of laboratory.

Prerequisites: 9.110 and 9.111.

9.337 Invertebrate Zoology (Aquatic) (4)

Comparative study of aquatic invertebrates which correlates morphology and physiology in relation to the aquatic environment and evolutionary development of the taxa. Two hours of lecture and four hours of laboratory. Field trips.

Prerequisites: 8 hours of biology and 8 hours of chemistry.

9.340 Microbiology (4)

A one semester course. Course will be centered around the relations between microorganisms and human health; and related laboratory procedures. Two hours of lecture, four hours of laboratory.

Prerequisites: 9.110 and 9.111, at least one year of chemistry and permission of Department Chairman.

9.341 General Bacteriology (4)

Bacteria and their relationship to human welfare. Culture methods; principles of sterility; aseptic techniques. Two hours of lecture, four hours of laboratory.

Prerequisites: eight hours of biology and one year of Organic Chemistry.

9.350 Advanced Biological Studies (4)

Introduction to research provided for qualified students in field of special interest. Offered to meet the needs of individual students.

Prerequisites: permission of Department Chairman.

9.356 Genetics (4)

Principles of heredity and variations in animals and plants. Problems to illustrate Mendelian inheritance. Three hours of lecture and one hour of laboratory.

Prerequisites: 12 hours of Biology.

9.358 Vertebrate Embryology (4)

Mechanics of development. Formation of germ cells, fertilization, cleavage of the fertilized ovum, morphogenesis, and later development of the frog, chick, and pig. Two hours of lecture, four hours of laboratory.

Prerequisite: 12 hours of biology.

9.360 Clinical Laboratory Practice (12)

Six-month apprentice experience in laboratory of a hospital affiliated with the University in its Medical Technology Program.

Prerequisite: senior in Medical Technology. May be taken twice for credit. Hours arranged.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 700-level courses are open only to graduate students.)

9.523 Bio-Ecology (4)

Aquatic and terrestrial ecology; principles stressed through extensive field work; limnological phase with emphasis on water pollution; terrestrial phase with emphasis on synecology in various ecosystems.

Prerequisites: senior or graduate in biology.

9.531 Animal Histology (4)

Structures and properties of cells. Microscopic study of tissues and organs of representative mammals, including man. Two hours of lecture, four hours of laboratory.

Prerequisites: senior or graduate in biology.

9.532 Parasitology (4)

A correlative course based on principles of biochemistry; physiology; anatomy and ecology. Emphasis on physiological relationship between parasite and host; clinical methods; control and prophylaxis; individual laboratory study project required.

Prerequisites: senior or graduate in biology.

9.533 Biological Designs (4)

Use of instrumentation in measuring and interpreting physiological phenomena. Two hours of lecture, four hours of laboratory.

Prerequisites: 12 hours of biology and permission of instructor.

9.535 Endocrinology (4)

The structure and function of the endocrine glands with emphasis on their control of biological processes. Two hours of lecture, four hours of laboratory.

Prerequisites: 9.335 and senior or graduate in biology.

9.541 Immunology (4)

Basic immunological principles, with special emphasis on the role of microorganisms in the study of fundamental immunological mechanisms. Laboratory techniques concerned particularly with diagnostic serological reactions. Two hours of lecture, four hours of laboratory.

Prerequisites: 9.341, one year of Organic Chemistry, and senior or graduate in biology.

9.543 Virology (4)

The nature and properties of plant, animal, and bacterial viruses. Laboratory techniques for cultivation and manipulation of viruses will be undertaken. Two hours of lecture, four hours of laboratory.

Prerequisites: 9.341, one year of Organic Chemistry, and senior or graduate in biology.

9.570 General Entomology (4)

Morphology, life history, classification, and economic importance of insects. Two hours of lecture, four hours of laboratory.

Prerequisites: senior or graduate in biology.

9.721 Advanced Plant Physiology (4)

A detailed study of biochemical mechanisms in plants including carbohy-

drate, lipid and protein metabolism, enzyme kinetics and chemistry of plant pigments.

Prerequisites: 9.321, one year of Organic Chemistry, and graduate status in biology.

9.730 Advanced Cell Physiology (4)

A study of physiology from a cellular point of view, emphasizing the functions of various cellular components such as chromosomes, mitochondria, membranes, nuclear, cytoplasmic interactions, and chloroplasts.

Prerequisites: 9.332 and graduate status in biology.

9.733 Radiation Biology (4)

Study of the biological aspects of ionizing radiation in relation to the whole organism, to organ systems and to cellular and subcellular structures through appropriately selected laboratory experiments.

Prerequisites: Graduate status in biology.

9.751 Advanced Genetics (4)

A consideration of salivary chromosomes, the nature of the gene, chromosomal irregularities, polyploidy, and mutations. Breeding experiments with *Drosophila* and small mammals will be conducted. Two hours of lecture and four hours of laboratory.

Prerequisites: 9.341, 9.356, and graduate in biology.

9.752 Bacterial Genetics (4)

An introduction to genetic principles applicable to bacteria and viruses. Mutation, recombination, transformation, conversion, transduction, bacteriophage, molecular genetics. Two hours of lecture, four hours of laboratory.

Prerequisites: 9.341, 9.356, and graduate in biology.

9.754 Immunogenetics (4)

The genetic control of immunologic reactions, as applied to blood groups and tissue transplants.

Prerequisites: 9.356 and graduate in biology.

9.761 Experimental Embryology (4)

Mechanics of fertilization and growth. A review of important contributions in the field of experimental embryology. Two hours of lecture and four hours of laboratory.

Prerequisites: 9.332, 9.358, and graduate in biology.

9.797 Master's Thesis Research (3-6)

Chemistry

Professors:

MARY H. ALDRIDGE
ROBERT T. FOLEY
FREDERICK A. H. RICE
LEO SCHUBERT (*Chairman*)

Associate Professor:

PAUL F. WATERS
LON S. HELGEN
LUIS A. VEGUILLA-BERDECIA

Assistant Professors:

ANN B. BRAUN
ROBERT M. FLORA
DORIS E. HADARY

Research Scientists:

BARBARA SERAFIN
LECH STEFANIAK
JERZY ZYLOWSKI

Adjunct Professors:

BENJAMIN ALEXANDER
DANIEL BANES
RICHARD C. CARLSTON
EDUARD FARBER
KEITH C. JOHNSON
ANDREJ MACEK
WILFRID B. MANN
JOHN K. TAYLOR

LEO WALL

Professorial Lecturers:

WALTER BENSON
WILLIAM J. CAMPBELL
LLOYD CURRIE

Lecturers:

NELDON L. JARVIS
IRVING MAY

UNDERGRADUATE DEGREE Bachelor of Science

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics are normally satisfied by major and related requirements. Consult department.	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the students' prior preparation in language and the courses selected at the University.

Required Language: German or Russian.

Departmental Requirements MAJOR COURSES (43-52 hours)
15.110 and 15.111 General Chemistry I and II (8) or 15.200 Chemical Principles (4)

- 15.210 Qualitative Inorganic Analysis (3)
- 15.211 Qualitative Inorganic Analysis Laboratory (1)
- 15.310, 15.311, 15.320, 15.321 Organic Chemistry I and II (10)
- 15.350 and 15.351 Quantitative Analysis (5)
- 15.400 and 15.401 Physical Chemistry I and II (8)
- 15.460 and 15.461 Instrumental Quantitative Analysis (5)
- 15.507 Chemical Literature (1)
- 15.550 Advanced Inorganic Chemistry I (3)
- 15.522 Qualitative Organic Analysis (3) or 15.560 and 15.561 Biochemistry I and II (8)

RELATED COURSES (16-18 hours)

- 51.220-51.221 Fundamentals of General Physics I and II (8)
- 51.222-51.223 General Physics Laboratory I and II (2)
- and a course in biology and a course in earth sciences.

TOOL COURSES (14 hours)

- 41.110 and 41.111 Fundamentals of Mathematics I and II (6)
- 41.222 and 41.223 Differential and Integral Calculus I and II (8)

Electives To complete minimum of 120 hours plus non-credit physical education. The student is urged to consider 55.533 Computer Programming as an elective.

Other Undergraduate Degrees See page 124 for information concerning requirements for the Bachelor of Science with major in distributed sciences.

GRADUATE DEGREE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Science

Course Requirements Minimum of 30 hours of approved graduate work, including 15.797 Master's Thesis Seminar (6) and 15.700 Seminar in Chemistry. Before this degree is awarded, the student must have completed, either in graduate or undergraduate school, two semesters of Advanced Inorganic Chemistry, two semesters of Advanced Organic Chemistry, one semester of Chemical Thermodynamics (or equivalent), one semester of Qualitative Organic Analysis, and one semester of Chemical Literature.

Written Comprehensive

Examinations Two, selected from the fields listed below.

Other Requirements Proficiency examination in technical German, Russian, or French. Thesis and oral defense of thesis.

Other Graduate Degrees See page 125 for information concerning requirements for the Master of Science in Science Teaching.

uate Comprehensive 15.001 Biochemistry

15.004 Physical Chemistry

Examination Fields 15.002 Organic Chemistry

15.005 Analytical Chemistry

15.003 Inorganic and Nuclear Chemistry

Doctor of Philosophy

General Requirements See page

Minimum of 72 hours of approved graduate work of which at least 30 hours (plus dissertation) must be completed in residence at the American University.

Core Courses The student is required to have completed

15.507 Chemical Literature (1)

15.520-15.521 Advanced Organic Chemistry I and II (6)

15.522 Qualitative Organic Analysis (3)

15.546 Chemical Thermodynamics (3)

15.550-15.551 Advanced Inorganic Chemistry I and II (6), and

15.642 Chemical Kinetics (3).

These courses need not be repeated if used to satisfy the requirements for the B.S. or M.S.

Specialty Courses The student is required to complete 6 hours of appropriate seminars.

Minors The student is required to have completed in addition to the Core Courses a minimum of 12 hours in minors. Minors may be selected from within the Chemistry Department or one of the other cognate sciences or mathematics.

Languages Proficiency in two languages, preferable Russian and German. Substitution of Computer Programming and Technology for one language is permissible after approval by the Chemistry Department; suitable standards must be met for such approval.

Dissertation The student is required to register for a minimum of 12 hours dissertation research.

Oral Examination The student is required to take an oral examination in defense of the dissertation thesis.

Graduate Comprehensive Four selected from:

Examination Fields 15.001 Biochemistry

15.002 Organic Chemistry

15.003 Inorganic and Nuclear Chemistry

15.004 Physical Chemistry

15.005 Analytical Chemistry

UNDERGRADUATE COURSES

15.100 Science of Chemistry (3)

Science and human experience. Structure of the atom, the molecule, bonds and their properties. Reactions and equilibria. Organic and biochemical processes. Kinetic molecular theory, radioactivity. Demonstrations. No laboratory. (Not for science majors.)

15.110 General Chemistry I (4)

For those with little or no chemistry background. Atomic theory, nuclear phenomena, and chemical bonding. Matter, energy, and chemical change. Solutions. Three hours of lecture, three and one-half hours of laboratory project work.

15.111 General Chemistry II (4)

Kinetics and equilibrium. Thermodynamics. Electrochemistry. The elements and their compounds treated systematically. Laboratory work includes qualitative analysis.

Prerequisite: 15.110.

15.200 Chemical Principles (4)

An honors course for those with good background in high school chemistry. Emphasis on the theories of general chemistry. Students must complete the year's work with 15.210 and 15.211. Three hours of lecture, three and one-half hours of laboratory project work.

15.210 Qualitative Inorganic Analysis (3)

Inorganic solution chemistry.

Prerequisite: 15.111 or 15.200.

15.211 Qualitative Inorganic Analysis Laboratory (1)

Practice of the separation and characterization of the more familiar ions. Students who have had 15.111 need not take this course. Three hours of laboratory.

Prerequisite: 15.200.

15.310 Organic Chemistry I (3)

Systematic and theoretical treatment of aliphatic and aromatic hydrocarbons, alcohols, halides, and ethers. Ionic and free radical reactions. Stereochemistry. Must be taken concurrently with 15.311.

Prerequisite: 15.111 or 15.210.

15.311 Organic Chemistry I Laboratory (2)

Laboratory theory and practice in synthesis. Introduction to organic qualitative analysis. Must be taken concurrently with 15.310. Six hours of laboratory.

Prerequisite: 15.111 or 15.210.

15.320 Organic Chemistry II (3)

Aliphatic and aromatic acids, nitrogen compounds, carbonyls, and their derivatives. Introduction to polyfunctional compounds. Must be taken concurrently with 15.321.

Prerequisite: 15.310.

15.321 Organic Chemistry II Laboratory (2)

Synthesis of polyfunctional compounds. Qualitative organic analysis. Introduction to infrared techniques and gas chromatography. Must be taken concurrently with 15.320. Six hours of laboratory.

Prerequisite: 15.311.

15.350 Quantitative Analysis (3)

Theory of gravimetric and volumetric analysis. The balance. Statistical analysis of data. Visible spectrophotometry. Potentiometry.

Prerequisite: 15.320.

15.351 Quantitative Analysis Laboratory (3)

Practice of gravimetric and volumetric analysis. The use of a spectrophotometer and a pH meter. The analysis of mixtures. Project work. Must be taken concurrently with 15.350.

Prerequisite: 15.320.

15.400 Physical Chemistry I (4)

Kinetic theory, particles and fields, thermodynamics, quantum theory, Schrodinger equation solutions, molecular motions, probability, statistical mechanics, thermodynamics, thermodynamic quantities from partition functions, atomic structure, orbital functions. Three hours of lecture, four hours of laboratory a week.

Prerequisites: 15.210, 15.221, 41.223.

15.401 Physical Chemistry II (4)

Perturbation, variation, valence-bond and molecular orbital methods, structure and spectroscopy, excited states, nuclear and electron magnetic spectroscopy, intermolecular forces, kinetics, phase rule, electrochemistry, surfaces. Three hours of lecture, four hours of laboratory.

Prerequisite: 15.400.

15.460 Instrumental Quantitative Analysis (3)

Theory of optical, electroanalytical and spectrophotometric methods; emission spectrography; flame photometry; atomic absorption spectrophotometry; polarography; amperometry; coulometry; potentiometry. Analysis of errors.

Prerequisites: 15.401, 15.350.

15.461 Instrumental Quantitative Analysis Laboratory (2)

Practice of optical, electroanalytical and other instrumental methods. Project work. Must be taken concurrently with 15.460.

Prerequisites: 15.401, 15.350.

15.009 Glassblowing (No credit)

Demonstrations and laboratory practice in the repair, operation, and construction of glass apparatus. Permission of Department required. One hour of demonstration, three hours of laboratory. Laboratory fee, all students, \$60.00.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600- and 700-level courses are open only to graduate students.)

15.507 Chemical Literature (1)

Survey and practice of reference, journal, and source literature. Required of undergraduate chemistry majors.

Prerequisites: 15.320 and 15.350.

15.520 Advanced Organic Chemistry I (3)

Theoretical and systematic organic chemistry. Stereochemistry and electronic effects. Ionic and free radical reactions.

Prerequisites: 15.320 and 15.401.

15.521 Advanced Organic Chemistry II (3)

Theoretical and systematic organic chemistry. Rearrangements and aromatic chemistry. Steroids.

Prerequisite: 15.520.

15.522 Qualitative Organic Analysis (3)

Identification of organic compounds including classical procedures and modern techniques such as infrared analysis and gas chromatography. Separation and identification of organic mixtures. One hour of lecture, six hours of laboratory.

Prerequisites: 15.320, 15.211, 15.507.

15.546 Chemical Thermodynamics (3)

Concepts of temperature, thermodynamic properties, specific heats. The Laws of Thermodynamics; their application to thermochemistry, chemical equilibrium and phase changes.

Prerequisite: 15.401.

15.550 Advanced Inorganic Chemistry I (3)

The classical atom. The quantum mechanical atom. Ionic bonding, lattice energy. Covalent bonding, valence bond approach, molecular orbital approach. Dipole—dipole interactions. Van der Waal's forces.

Prerequisite: 15.401.

- 15.551 Advanced Inorganic Chemistry II (3)**
The bonding in metals. Transition metal chemistry including ligand field theory. Jahn Teller effect. The trans effect. Inorganic materials, boron hydrides, rare gas compounds, inclusion compounds, inorganic polymers.
Prerequisite: 15.550.
- 15.556 Radiochemistry (3)**
Radioactivity, isotopes, fundamental particles of matter, tracer chemistry. Instrumentation used for radioactivity. Two hours of lecture, two hours of laboratory.
Prerequisite: 15.400.
- 15.560 Biochemistry I (4)**
The chemistry of carbohydrates, proteins, and fats. Blood and respiration. Renal function and acid-base balance. Three hours of lecture, four hours of laboratory.
Prerequisites: 15.320 and 15.401.
- 15.561 Biochemistry II (4)**
General properties of enzymes. Biological oxidation. Metabolism of carbohydrates, proteins and fats. Three hours of lecture, four hours of laboratory.
Prerequisite: 15.560.
- 15.568 Physiological Chemistry (4)**
An introductory course in biochemistry for the non-chemistry major. Three hours of lecture, four hours of laboratory.
Prerequisites: 15.320 and 9.322.
- 15.580 History of Chemistry (2)**
Development of the concepts in chemistry. Biographies of eminent chemists.
Prerequisite: 30 credits in chemistry.
- 15.610 Advanced Inorganic Analytical Chemistry (3)**
Systematic treatment of modern analytical methods and separations.
Prerequisite: 15.460.
- 15.613 Electroanalytical Chemistry (3)**
Electrochemical theory and ionic equilibria. E M F and pH. Conductometric, oscillometric; electrographic, coulometric, polarographic and amperometric analyses. Controlled potential analysis and potentiometric titrations.
Prerequisite: 15.460.
- 15.619 Inorganic Preparations (3)**
The theory and practice of inorganic preparations. Synthesis of representative compounds. One hour of lecture, six hour of laboratory.
Prerequisites: 15.460 and 15.550.
- 15.620 Chemistry of the Carbohydrates (3)**
Configurational isomerism, ring structure, and tautomeric forms. Chemistry of the uronic acids, anhydro sugars, glycosides, hexitols, cyclitols, disaccharides, and representative polysaccharides.
Prerequisites: 15.401 and 15.520.
- 15.623 Organic Preparations (3)**
Preparative methods of organic chemistry. Emphasis on techniques such as vacuum distillation, chromatography, extractions. Preparations from the original literature. One hour of lecture, six hours of laboratory.
Prerequisite: 15.520.
- 15.626 Heterocyclic Compounds (3)**
Chemistry of pyridine, pyrrole, quinoline, other heterocyclic compounds.
Prerequisite: 15.520.
- 15.630 Physical Organic Chemistry (3)**
Polar and free radical mechanisms, kinetics and stereochemistry of organic

reactions. Physical techniques for obtaining information on organic reactions.
Prerequisites: 15.400 and 15.520.

15.632 High Polymer Chemistry (3)

The concepts of macromolecules and their non-homogeneous nature. The physical-organic chemistry of polymerization. Behavior and structure of polymers. Demonstrations of special laboratory techniques.
Prerequisites: 15.320 and 15.401.

15.640 Colloid and Surface Chemistry (3)

Application of physicochemical principles of colloidal systems. Solid and liquid surfaces, sorption, large molecules in solution, structure of natural and synthetic colloids.
Prerequisite: 15.401.

15.642 Chemical Kinetics (3)

Order and molecularity of reactions. Activated complex; theory for elementary reactions. Reactions in solutions and on surfaces. Complex reaction mechanisms. Non-isothermal kinetics.
Prerequisite: 15.400.

15.643 Quantum Chemistry (3)

The eigenvalue problem. Operators and matrices. Introduction to group theory. Elementary wave mechanics. Atomic spectra. Molecular orbital theory.
Prerequisite: 15.401.

15.644 Molecular Structure (3)

Interpretation of electronic, rotational, and vibrational spectra of molecules. Quantum mechanical calculations using ICAO-MO-SCF techniques.
Prerequisite: 15.643.

15.662 Chemistry of Organic Drugs (3)

The preparation and synthetic analogues of therapeutically active substances. Salicylates, purine and pyrimidine derivatives, alkaloids, sex hormones, cardioactive glycosides and antibiotics.
Prerequisite: 15.561.

15.663 Enzyme Chemistry (3)

Classification, kinetics, chemical properties, and mechanism of action; role in metabolic processes.
Prerequisite: 15.561.

15.666 Proteins and Amino Acids (3)

Detailed treatment of the chemistry and metabolism of amino acids, polypeptides, purines, pyrimidines, and proteins.
Prerequisite: 15.561.

15.667 Chemistry of some Biologically Active Compounds (3)

Development of knowledge of the chemistry of some biologically active compounds. Detailed study of representative and important examples from the different classes of biologically active compounds.
Prerequisite: 15.561.

15.670 Electrochemistry (3)

Double layer and electrokinetic phenomena; electrode processes; nonaqueous solvents; corrosion; electroplating; batteries; fuel cells; biochemical processes.
Prerequisite: 15.401.

15.700 Seminar in Chemistry (1)

Selected topics. Preparation and presentation of a paper of professional quality.
Prerequisite: permission of Department.

15.797 Master's Thesis Seminar (3-6).

15.799 Doctoral Dissertation Seminar (3-6)

Earth Sciences

Admission to the B.S. and M.S. programs in Earth Sciences was discontinued after the fall registration of 1966. Students admitted prior to that date and who will be unable to complete their degree requirements by June, 1970, should consult the Chairman of the Department of Earth Sciences

Professors:

JOHN W. FREY (*Emeritus*)
MATTHEW F. NORTON (*Chairman*)

Assistant Professor:

EDWARD T. BUTLER, JR.

Adjunct Professors:

PAUL S. BAUER
GEORGE S. SWITZER

Professorial Lecturer:

IRVING A. BREGER

Lecturer:

JOHN K. HARTSOCK

UNDERGRADUATE DEGREE Bachelor of Science

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics are normally satisfied by major and related requirements. Consult department.	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Recommended languages: French, German or Russian. Students who already have an intermediate-level knowledge of one of these foreign languages upon entering the University are strongly urged to study a second appropriate language.

Departmental Requirements MAJOR COURSES (40 hours)

All students are required to complete the following courses (core requirements in Earth Sciences) with grades of C or better:

- 27.101 and 27.102 Principles of Earth Sciences I and II (8)
- 27.321 and 27.322 Biological Earth Sciences I and II (8)
- 27.331 and 27.332 Chemical Earth Sciences I and II (8)
- 27.341 and 27.342 Physical Earth Sciences I and II (8)
- 27.401 Senior Seminar in Earth Sciences (3)
- 27.472 Field Methods (4)
- 27.500 Literature of Earth Sciences (1)

All students whose cumulative academic index allows it (1.75 or better) are strongly urged to undertake an Individual Research Project 27.490 for three hours credit in the senior year.

RELATED COURSES (16-18 hours)

15.110-15.111 General Chemistry I and II (8) or 15.200 Chemical Principles (4) and either 51.210-51.211 Elements of General Physics I and II (6) or 51.220-51.221 Fundamentals of General Physics I and II (8) and 51.222-51.223 General Physics Laboratory (2). General Biology 9.110 and 9.111 (8) is strongly recommended. Other additional related courses may be advisable for certain areas of interest within Earth Sciences.

TOOL COURSES (8-14 hours)

Mathematics through 41.223 Differential and Integral Calculus II. Usual sequence: 41.110-41.111 Fundamentals of Mathematics I and II (6), 41.222-41.223 Differential and Integral Calculus I and II (8).

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREE

Master of Science

Course Requirement Minimum of 30 hours of approved graduate work, including 27.797 Master's Thesis Seminar (3 or 6).

Written Comprehensive Examinations Two, including 27.1 General Earth Sciences, and one specialized field.

Other Requirements Reading proficiency in French, German, or Russian as evidenced (1) by satisfactory completion of an intermediate level course, or (2) by a proficiency examination. Thesis and oral defense of thesis.

Graduate Comprehensive Examinations Fields **CORE FIELD**
27.001 General Earth Sciences.

SPECIALIZED FIELDS

27.002 Earth Sciences: Biological 27.004 Earth Sciences: Physical
27.003 Earth Sciences: Chemical

Other Graduate Degrees See page 125 for information concerning requirements for the Master of Science in Science Teaching.

UNDERGRADUATE COURSES

27.100 Earth Sciences (3)

Survey of earth features and processes: time, weather, climate, the oceans, minerals, rocks, landforms, glaciers, volcanoes, earthquakes, origin and development of life, geologic history, resources.

27.101 Principles of Earth Sciences I (4)

Lecture identical with 27.100; laboratory: geographic grid, construction and interpretation of planimetric, topographic, and geologic maps, weather analysis, navigation, identification of minerals, rocks, and fossils. Three hours lecture, four hours laboratory, field trip.

27.102 Principles of Earth Sciences II (4)

Geologic history of North America: sedimentation, stratigraphy, and structural geology; map and aerial photograph interpretation; chemical and microscopic identification of minerals and rocks; field mapping. Two hours lecture, four hours laboratory, two field trips.

Prerequisites: 27.101 or 27.100 and 27.103, or 27.150.

27.103 Principles of Earth Sciences I Laboratory (1)

Those who have taken 27.100 may register for this laboratory in order to complete the equivalent of 27.101 and qualify to enter 27.102.

27.150 Basic Geography (4)

Fundamental principles of physical geography: earth origin, position, and motion; maps; weather; climate; landforms; oceans; resources—their use and conservation; natural limits on development. Three hours lecture, two hours laboratory.

Prerequisite: permission, except for students in the School of International Service.

27.321 Biological Earth Sciences I (4)

Principles of classification of living and fossil organisms compared; biostratigraphy and evolution; origin and occurrence of fossils. Illustrated by select vertebrate and invertebrate taxonomic groups. Two hours lecture, four hours laboratory.

Prerequisite: 27.102 or permission.

27.322 Biological Earth Sciences II (4)

A study of the evolution of the invertebrate phyla as represented by fossils. Two hours lecture, four hours laboratory.

Prerequisite: 27.321.

27.331 Chemical Earth Sciences I (4)

Geochemical concepts and procedures; chemical and crystallographic classification and identification of minerals; principles of igneous rock classification; the petrographic microscope and X-rays in mineral identification. Two hours lecture, four hours laboratory.

Prerequisites: 27.102 and 15.111 or 15.200.

27.332 Chemical Earth Sciences II (4)

Chemistry of silicate melts, sedimentation, and metamorphism; hand specimen and microscopic identification of igneous, sedimentary, and metamorphic rocks and ores; isotope geochronology; geothermometry; mineral deposits. Two hours lecture, four hours laboratory.

Prerequisite: 27.321.

27.341 Physical Earth Sciences I (4)

Interpretation of gravity, heat flow, electric, magnetic, and seismic data; wave motion in earth processes; atmospheric physics; physics of sedimentation and geomorphology; experimental rock deformation. Two hours lecture, four hours laboratory.

Prerequisites: 27.102 and 51.211 or 51.221 and 51.222, 51.223.

27.342 Physical Earth Sciences II (4)

Identification, classification, analysis in orthographic and stereographic projections, and significance of earth structures; structural petrology; map interpretation and block diagrams. Two hours lecture, four hours laboratory.

Prerequisite: 27.341.

27.401 Senior Undergraduate Seminar (3)

Required of all senior majors in the Department of Earth Sciences. Consideration of selected cross-disciplinary problems in earth sciences.

Prerequisite: permission.

27.472 Field Methods (4)

Field problems in earth sciences; map construction and mechanics of mapping; two field studies with formal reports and maps. Average of eight hours per week in the field.

Prerequisites or Corequisites: 27.322, 27.332, and 27.342.

ADVANCED COURSES

(500-level courses are open to graduate students and qualified advanced undergraduates with permission; 600- and 700-level courses are open only to graduate students.)

27.500 Literature of Earth Sciences (1)

Survey of reference, journal, and source literature; styles of scientific report writing and scientific illustration.

27.501 Analytical Geology (3)

Study of the origin, materials, and processes of the lithosphere, atmosphere, hydrosphere, and biosphere, with emphasis on identification and analysis of geologic materials and forms. Two hours lecture, two hours laboratory.

Prerequisite: permission.

27.502 Earth Sciences Materials (3)

Minerals, rocks, and fossils examined by petrographic and binocular microscopes, blowpipe, wet chemical tests. Two hours lecture, two hours laboratory. *Prerequisite:* permission.

27.506 Oceanography (3)

Survey of the physics, chemistry and biology of the oceans; physiography and geology of ocean basins. *Prerequisite:* permission.

27.560 Regional Geography (3)

Location, physical subdivisions, climatic factors, physical control of boundaries, transportation, and other geographic features of a selected major area. May be repeated for credit, if a different area is the topic.

Prerequisite: 27.100, 27.101 or 27.150.

27.600 Advanced Topics in Earth Sciences (3)

Study of a selected special topic or topic in Earth Sciences. May be repeated for credit, if a different topic is covered.

Prerequisite: permission.

27.621 Advanced Biological Earth Sciences I (4)

The effects of environment on the morphology and distribution of living and fossil organisms.

Prerequisite: permission.

27.622 Advanced Biological Earth Sciences II (4)

The theory and practical use of fossils in stratigraphy.

Prerequisite: 27.621.

27.631 Advanced Chemical Earth Sciences I (4)

Crystal growth and the external and internal symmetry of crystals as revealed by goniometric, optical, and X-ray analyses; crystal chemistry; geometric crystallography.

Prerequisite: permission.

27.632 Advanced Chemical Earth Sciences II (4)

Principles of chemical equilibrium applied to igneous and metamorphic rocks; origin, evolution, and crystallization of magmas; environment and facies of metamorphism; microscopic analysis of rocks.

Prerequisite: 27.631.

- 27.641 Advanced Physical Earth Sciences I (4)**
Physical bases of gravity, heat flow, electric, magnetic, and seismic phenomena and measurements. Observations and case studies.
Prerequisite: permission.
- 27.642 Advanced Physical Earth Sciences II (4)**
Physical bases of dynamic meteorology and oceanography; theory of atmospheric and oceanic tropospheric and stratospheric circulation; waves and tides.
Prerequisite: 27.641 or permission.
- 27.700 Seminar in Earth Sciences (3)**
Selected topics in earth sciences; preparation and presentation of a technical paper of professional quality. May be repeated for credit, if different topics are covered.
Prerequisite: permission.
- 27.797 Master's Thesis Seminar (3-6).**

Mathematics and Statistics

Professors:

NATHANIEL MACON
GRACE SHOVER QUINN
STEVEN H. SCHOT (*Chairman*)
JOHN H. SMITH
WALTER F. SHENTON (*Emeritus*)

Research Associates:

ALEXANDER WEINSTEIN

Associate Professors:

BASIL P. KORIN
EDMUND B. MCCUE

Assistant Professors:

DAVID CROSBY

DONALD H. FLANDERS
WILLIAM STANGER
HOWARD WILSON

Instructors:

HELMER G. JUNGHANS
CLAIRE T. MACHLIN

Adjunct Professors:

HOWARD H. CAMPAIGNE
JEROME CORNFIELD
PHILIP DESIND
WALTER W. JACOBS
ELGY S. JOHNSON
C. RUSSELL PHELPS
HARRY M. ROSENBLATT

ERNEST RUBIN
RAYMOND J. SEEGER
WALT R. SIMMONS
FEODOR THEILHEIMER

Professorial Lecturers:

BARNETT R. AGINS
ELIZABETH CUTHILL
WILSON L. SCOTT
DANIEL SHANKS
VIVIAN EBERLE SPENCER

Lecturers:

MORRIS ABRAMS
IRVING GEDANKEN
ARTHUR JAFFE

UNDERGRADUATE DEGREE Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics are normally satisfied by major and related requirements. Consult department.	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Required language: French, German or Russian.

MAJOR IN MATHEMATICS

Departmental Requirements MAJOR COURSES (26 hours beyond 41.111)
41.110, 41.111, 41.222, 41.223, 41.310, 41.311, 41.322
three hours selected from 41.321, 41.440, 41.474

and one year selected from 41.502-503, 41.512-513, 41.520-521, 41.550-551, 69.500-501.

RELATED COURSES (21 hours)

51.220-221 Fundamentals of General Physics I and II (4, 4)

51.222-223 General Physics Laboratory I and II (1, 1)

15.110-111 General Chemistry I and II (4, 4)

and 51.330 Principles of Mechanics I (3) or other advanced course in Physics or Chemistry.

TOOL COURSES

None

Electives To complete minimum of 120 hours plus non-credit physical education.

MAJOR IN STATISTICS

Same as for mathematics (see above) plus 12 hours in statistics and probability.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts in Mathematics

Course Requirements Minimum of 30 hours of approved graduate work, including 41.797 Master's Thesis Seminar in Mathematics and Statistics (3-6).

Written Comprehensive Examinations Three, including 41.001 Modern Algebra or 41.002 Matrix Theory; 41.003 Real Variables or 41.004 Complex Variables; and one other approved field.

Other Requirements Proficiency examination in French, German, or Russian. Thesis and oral defense of thesis and the field in which it lies.

Master of Arts in Statistics

Course Requirements Minimum of 30 semester hours of approved graduate work, including 41.797 Master's Thesis Seminar in Mathematics and Statistics.

Written Comprehensive Examinations Three, including 69.001 Statistical Theory; 41.024 Theory of Probability; and one other approved field in statistics, mathematics (especially 41.027 Linear Algebra for Statistics or 69.026 Analysis for Statistics) or a field of application.

Other Requirements Proficiency examination in Russian, German, or French. Thesis and oral defense of thesis and the field in which it lies.

Doctor of Philosophy in Mathematics

Course Requirements Minimum of 66 hours of approved graduate work plus the required semester hours in 41.799 Doctoral Seminar in Mathematics and Statistics, at least 30 (plus dissertation credit) of which must be completed in residence at The American University.

Written Comprehensive Examinations Five approved fields. 41.006 Modern Algebra and Matrix Theory; 41.005 Real and Complex Variables; and three other approved fields, at least two of which must be in mathematics or mathematical statistics and one of which may be in a field closely related to the field of major interest.

Graduate Comprehensive MATHEMATICS

Examination Fields CORE FIELDS

- 41.001 Modern Algebra (M.A. only)
- 41.002 Matrix Theory (M.A. only)
- 41.003 Real Variables (M.A. only)
- 41.004 Complex Variables (M.A. only)
- 41.005 Real and Complex Variables (Ph.D. only)
- 41.006 Modern Algebra and Matrix Theory (Ph.D. only)

SPECIALIZED FIELDS

- 41.010 Mathematical Foundations
- 41.011 Number Theory
- 41.012 Partial Differential Equations
- 41.013 Integral Equations
- 41.014 Calculus of Variations
- 41.018 Numerical Analysis
- 41.023 Stochastic Processes
- 41.024 Theory of Probability
- 41.025 Linear and Dynamic Programming

Other Requirements Proficiency in two languages chosen from French, German or Russian. Dissertation on a topic sponsored by a full-time faculty member in an appropriate field of analysis or algebra and oral defense of dissertation and the field in which it lies.

Doctor of Philosophy in Statistics

Course Requirements Minimum of 66 semester hours of approved graduate work plus the required semester hours in 41.799 Doctoral Seminar in Mathematics and Statistics, at least 30 (plus dissertation credit) of which must be completed in residence at The American University.

Written Comprehensive Examinations Five fields as follows:
69.002 and 69.003 Advanced Statistical Theory I and II
41.024 Theory of Probability
69.026 Analysis for Statistics
41.027 Linear Algebra for Statistics

Other Requirements Proficiency in two languages chosen from Russian, German, and French. Dissertation on a topic sponsored by a full-time faculty member in an appropriate field of mathematical statistics and oral defense of the dissertation and the field in which it lies.

Graduate Comprehensive STATISTICS

Examination Fields CORE FIELDS

- 69.001 Statistical Theory (M.A. only)
- 69.002 and 69.003 Advanced Statistical Theory I and II (Ph.D. only)

- 41.024 Theory of Probability (M.A. and Ph.D.)
 69.026 Analysis for Statistics (required for Ph.D.)
 69.027 Linear Algebra for Statistics (required for Ph.D.)

SPECIALIZED FIELDS

- 41.023 Stochastic Processes
 69.010 Theory of Experiment Design
 69.020 Theory of Sampling

UNDERGRADUATE COURSES

Mathematics

41.100-41.101 Survey of Mathematics I, II (3, 3)

Linear equations and relations, sets, compound statements, counting; probability, and functions, with applications in the social and management sciences.
Prerequisite: Two years of high school mathematics. No credit for 41.100 after 41.110; no credit for both 41.101 and 110.

41.110 Fundamentals of Mathematics I (3)

Mathematical logic; number of systems; polynomials; algebraic fractions; exponents and radicals; sets; equations; inequalities; matrices and determinants; functions and relations; algebraic functions.
Prerequisite: Three years high school mathematics or 41.100. No credit for both 41.101 and 110.

41.111 Fundamentals of Mathematics II (3)

Exponential and logarithmic functions; trigonometric functions; inverse trigonometric functions; De Moivre's theorem; analytic geometry: Cartesian and polar coordinates; conic sections, applications, parametric equations.
Prerequisite: 41.110 or equivalent.

41.222 Differential and Integral Calculus I (4)

Differentiation of algebraic and transcendental functions with applications; integration of polynomials with applications; parametric equations; polar coordinates; law of the mean and indeterminate forms.
Prerequisite: 41.111 or equivalent.

41.223 Differential and Integral Calculus II (4)

Methods of integration with further applications; expansion of functions in series; hyperbolic functions; partial differentiation; multiple integrals.
Prerequisite: 41.222.

41.310 Linear Algebra (3)

Vector spaces, systems of linear equations, solutions by matrices, determinants, linear transformations, algebraic forms.
Prerequisite: 41.222 and permission of instructor, or 41.223.

41.312 Abstract Algebra (3)

Sets; groups, rings, integral domains; fields; rational numbers, real numbers, complex number, polynomial rings.
Prerequisite: 41.223 or 41.222 and permission.

41.321 Differential Equations (3)

First-order first-degree equations, linear equations of n 'th order with constant coefficients, Laplace transforms, applications to mechanics and electrical circuits, special equations of higher order, solution in series.
Prerequisite: 41.223.

41.322 Intermediate Calculus (3)

Functions of several variables. Mappings and Jacobians. Implicit function and inversion theorems. Lagrange multipliers. Quadratic forms. Gamma function. Line integrals. Green's, Gauss', and Stokes' theorems.

Prerequisite: 41.223.

41.440 Modern Geometry (3)

Applications of linear algebra to analytic geometry; linear mappings, Euclidean and unitary vector spaces; geometry of quadric surfaces; reduction of quadratic forms.

Prerequisite: 41.310.

41.474 Probability (3)

Algebra of sets; probability in discrete sample spaces; combinatorial analysis; random variables; binomial, Poisson, normal and other distributions; applications.

Prerequisite: 41.223.

41.480 History of Mathematics (1)

Individual topics in the history of mathematics since Newton and Leibniz.

Prerequisite: Permission of the instructor.

Statistics

69.202 Basic Statistics (3)

Classification of data, averages, dispersion, probability, frequency distributions, confidence intervals, tests of significance, simple regression and correlation.

Prerequisite: 41.100.

69.300 Business Statistics (3)

Estimation, inference, multiple regression and correlation, index numbers, secular trend, seasonal and cyclical variations.

Prerequisite: 69.202.

69.301 Psychological Statistics (3)

Estimation, inference, special methods of two-variable correlation, multiple regression and correlation, design of samples and experiments, contingency tables.

Prerequisite: 69.202.

69.400 Managerial Statistics (3)

Survey of first-year statistics (see 69.202 and 69.300); required for MBA candidates entering without 6 hours of statistics.

Prerequisite: 41.100 or graduate status.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600- and 700-level courses are open only to graduate students.)

Mathematics

FOUNDATIONS AND ALGEBRA

41.502 Foundations of Mathematics I (3)

Modern developments in mathematics including elementary symbolic logic, truth tables, axiomatics, foundations of geometry, introduction to set theory, transfinite numbers.

Prerequisites: 41.322 and further work or teaching experience in mathematics.

41.503 Foundations of Mathematics II (3)

Continuation of 41.502. Peano's axioms, Dedekind cuts, the real and complex number systems, functions, homeomorphism and topological concepts, groups, rings, fields and other algebraic systems.

Prerequisite: 41.502 or equivalent.

41.510 Matrix Theory (3)

Vector spaces, linear transformations, similarity, rational and classical canonical forms, unitary spaces, unitary equivalence, quadratic forms, congruence, rings of matrices, matrix representations of groups and algebras.

Prerequisite: 41.310.

41.512 Modern Algebra I (3)

Formulation of induction; equivalent relations and partitions; properties of groups through the Sylow theorems, classification of groups of low order; properties of rings and ideals, factorization theory, Eisenstein's criterion, Zorn's lemma, Krull's theorem; modules.

Prerequisite: 41.312.

41.513 Modern Algebra II (3)

Solvable groups; basic theorem for finitely generated Abelian groups; structure of fields and extension; Wedderburn's theorem, Galois theory; Wedderburn-Artin structure-theory, Frobenius theorem, group representations.

Prerequisite: 41.512.

41.515 Number Theory (3)

Divisibility; sequences of primes, fundamental theorem of arithmetic, congruences; totient, Euler's theorem; Wilson's theorem; congruences, diophantine equations; primitive roots; quadratic residues; Jacobi symbol; quadratic reciprocity; number-theoretic functions; Mobius inversion formula, multiplicative functions; sums of squares; partitions.

Prerequisite: 41.223.

41.518 Linear Programming (3)

Theoretical, computational, and applied aspects of linear programming. Simplex, revised simplex, transportation algorithms; duality; parametric programming; theory of games and management problems applications.

Prerequisite: 41.310.

41.519 Advanced Topics in Mathematical Programming (3)

Revised simplex method, parametric programming, solution of large-scale systems, decomposition algorithm, network analysis, integer programming, non-linear programming, stochastic programming, dynamic programming.

Prerequisites: 41.518 and 41.320.

41.610 Advanced Linear Algebra (3)

Function of matrices, matrix equations, special classes of matrices, sets of linear transformations, products of vector spaces, introduction to multilinear algebra, symplectic and orthogonal spaces, linear groups, associative and non-associative linear algebras, projective geometry, infinite-dimensional vector space.

Prerequisite: 41.512.

41.616 Theory of Groups (3)

Homomorphism and isomorphism theorems and applications; p groups; direct products, Remakrull-Schmidt theorems; chains and refinement theorems; Schreier, Jordan-Holder theorems; solvable, supersolvable, nilpotent groups; P. Hall's theorems; Burnside's theorem; group extensions; Abelian groups; applications.

Prerequisite 41.512.

41.710 Selected Topics in Algebra (3)

Topics selected from: field theory; theory of rings and algebras; algebraic number theory; theory of quadratic forms; lattice theory; homological algebra; representations of groups and algebras; Lie algebra and groups, non-associative algebras, topological algebra.

Prerequisite: 41.512.

ANALYSIS, GEOMETRY, AND TOPOLOGY

41.520 Introduction to Analysis I (3)

Limits, continuity, Bolzano-Weierstrass theorem, uniform continuity, Heine-Borel theorem, differentiability, Riemann and Stieltjes integral's, mean-value theorems, infinite series, sequences of functions. Arzela's theorem. Taylor's theorem, Weierstrass approximation theorem.

Prerequisite: 41.322.

41.521 Introduction to Analysis II (3)

Functions of several variables, partial differentiation, Jacobians; implicit function theorem.

Prerequisite: 41.520.

41.523 Ordinary Differential Equations (3)

Existence theorems, Riccati equation, solutions in power series, regular and irregular singular points, two-point boundary-value problems, Sturm-Liouville theory, orthogonal functions.

Prerequisite: 41.321.

41.524 Partial Differential Equations (3)

First and second order linear equations, type, characteristics, reduction to normal forms, separation of variables, Poisson's formula, Green's function.

Prerequisite: 41.523.

41.525 Special Functions (3)

Fundamental properties of Gamma and Bessel functions, Legendre, Hermite, Laguerre, and Chebyshev polynomials; hypergeometric functions; asymptotic expansion; determination of zeros.

Prerequisite: 41.521.

41.528 Vector Analysis (3)

Algebra and calculus of vectors; theorems of Green, Gauss, Stokes; applications to differential geometry, mechanics, hydrodynamics, electromagnetism, introduction to tensors.

Prerequisite: 41.321.

41.546 Point-Set Topology (3)

Topological spaces, open and closed sets, compactness, connectivity, metric —, Hausdorff—, and linear normed-spaces, topological transformations, separation theorems.

Prerequisite: 41.520.

41.620 Complex Variables I (3)

Topological concepts, differentiation and integration of complex-valued functions, analyticity, Cauchy's theorem, Laurent series, singularities, contour integration and residue calculus.

Prerequisite: 41.521.

41.621 Complex Variables II (3)

Analytic continuation, entire functions, conformal mapping, Riemann surfaces, periodic and elliptic functions, Riemann mapping theorem.

Prerequisite: 41.620.

41.622-41.623 Real Variables I and II (3, 3)
Theory of measure and integration. Measurable sets; Lebesgue measure; measure spaces; measurable functions; integration; convergence theorems; L_p spaces, Daniell integration; topics selected from introductory probability, Hilbert space, Banach space.
Prerequisite: 41.521.

41.625 Calculus of Variations (3)
Extremization of functionals. Euler, Legendre, Weierstrass, and Jacobi necessary conditions. Sufficient conditions for weak and strong extrema. Extremal fields and Hilbert's invariant integral. Isoperimetric problems and inequalities. Direct methods.
Prerequisite: 41.521.

41.626 Integral Equations (3)
Fredholm equations and theorems, Neumann series, resolvent, degenerate kernels. Hilbert-Schmidt theory, symmetric kernels, eigenfunction expansions, properties and estimation of eigenvalues. Application to boundary value problems. Singular integral equations.
Prerequisite: 41.521.

41.634 Functional Analysis (3)
Topological vector spaces, Banach spaces, linear functional and dual space, W^* -topology, uniform boundedness and closed graph theorems, completely continuous operators, Hilbert space, spectral theorem, unbounded operators.
Prerequisites: 41.310 and 41.623.

NUMERICAL ANALYSIS

41.560 Numerical Analysis I: Basic Problems (3)
Interpolation, finite differences, numerical differentiation, integration, and approximation by orthogonal functions, least squares, asymptotic representations, difference equations, continued fractions, planning tables, optimum interval tables, differencing.
Prerequisite: 41.223.

41.561 Numerical Analysis II: Matrices (3)
Calculation of inverses of matrices by various methods, iterative processes for solving systems of simultaneous linear equations, and determination of eigenvalues and eigenvectors of matrices.
Prerequisite: 41.510.

41.562 Numerical Analysis III: Ordinary Differential Equations (3)
Numerical solution of ordinary differential equations of initial value and boundary value types. Picard's method. Runge-Kutta and other methods. Error analysis, stability, rates of convergence. Rayleigh-Ritz method.
Prerequisites: 41.560 and 41.321.

41.563 Numerical Analysis IV: Partial Differential Equations (3)
Finite difference methods for elliptic and parabolic equations. Matrix iterative analysis, overrelaxation. Approximation of operators and monotony theorems. Error analysis, stability, and rates of convergence. Characteristic methods for hyperbolic equations.
Prerequisite: 41.560.

MATHEMATICAL PHYSICS

41.550 Mathematics for Physics I (3)
Fourier series, integrals, and transforms, Laplace transform methods, eigenvalues and diagonalization of matrices, oscillatory systems and normal modes, calculus of variations, special functions.
Prerequisite: 41.321.

- 41.551 Mathematics for Physics II (3)**
Wave equation, vibrating strings and membranes, Laplace's equation, heat equation, complex variables, and contour integration, conformal mapping, tensors.
Prerequisite: 41.550.
- 41.654 Partial Differential Equations of Mathematical Physics I (3)**
Second order hyperbolic equations, characteristics, Cauchy and Goursat problems, Riemann's method, quasi-linear equations, Legendre transformation, wave equation in n -dimensions, spherical means. Hadamard's method.
Prerequisites: 41.524 and 41.551.
- 41.655 Partial Differential Equations of Mathematical Physics II (3)**
Second order elliptic, parabolic, and mixed equations, problems of Dirichlet and Neumann, Green's function, potentials of volume and surface distributions, diffusion phenomena, Tricomi's equation.
Prerequisite: 41.654.
- 41.656 Mathematical Theory of Fluid Dynamics I (3)**
Basic kinematic and dynamics concepts, incompressible fluids, vorticity and circulation theorems, potential and stream function, plane and axially symmetric flows, conformal mapping, aerofoils, vortex lines and streets, jets and free streamline problems.
Prerequisite: 41.551.
- 41.657 Mathematical Theory of Fluid Dynamics II (3)**
Dynamics and thermodynamics of compressible fluids, subsonic, transonic, and supersonic flows, Prandtl-Busemann method, hodograph method, shock waves, viscous fluids, boundary layer theory, and turbulence.
Prerequisite: 41.656.

SEMINARS

- 41.720 Seminar: Analysis (3)**
Research in analysis, involving individual projects.
Prerequisite: 41.621 or 41.623.
- 41.750 Seminar: Applied Mathematics (3)**
Research in applied mathematics, involving individual projects.
Prerequisite: 41.551.
- 69.790 Seminar in Statistical Theory and Probability (3)**
Advanced topics will be considered according to the needs of the students.
Prerequisites: 69.610-611 and another 600-level sequence.
- 41.797 Master's Thesis Seminar in Mathematics and Statistics (3-6)**
- 41.799 Doctoral Dissertation Seminar in Mathematics and Statistics (3-6).**

Statistics

THEORY OF PROBABILITY AND STATISTICS

- 41.570 Analysis for Statistics I (3)**
Selected topics in complex variables; integrals of analytic functions; uniform convergence; power series; singularities; residues and contour integration. Fall.
Prerequisites: 41.322.
- 41.571 Analysis for Statistics II (3)**
Point sets; measurable sets and functions; Lebesgue integrals; differentiation

and integration; interchange of order; Lebesgue-Stieltjes integrals; dominated convergence. Spring.

Prerequisite: 41.322.

41.574-575 Theory of Probability I and II (3, 3)

Foundations of the theory of probability; random variables; distribution functions; generating and characteristic functions; special distributions and statistics; limit theorems; Markov chains; introduction to stochastic processes. Fall. Spring.

Prerequisite: 41.474 *corequisite* 41.570.

41.576 Mathematical Methods of Probabilistic Systems (3)

Queueing theory; single- and multi-channel. Inventory systems, stochastic demands, dynamic programming. Dantzig-Madansky two-stage formulation, Charnes-Cooper change constrained programming. Recent advances.

Prerequisites: 41.310, 41.321, and 41.474.

69.500-69.501 Mathematical Statistics I and II (3, 3)

Probability concepts; discrete and continuous distributions; expected values and moments; sampling, point estimators, desirable properties; maximum likelihood; linear estimation, regression, and variance analysis; interval estimation and significance tests. Fall. Spring.

Prerequisites: 41.322 and 41.474, *corequisite* 41.310.

69.510-69.511 Theory of Sampling I and II (3, 3)

Mathematical development of basic principles of survey design including methods for determining expected value, bias, variance and mean square error; simple random, systematic, stratified, cluster, multi-stage, and double sampling; unbiased, ratio, regression, and composite estimation; optimum allocation of resources; controlled and other non-simple methods of selection; introduction to measurement error; comparison of alternative designs.

Prerequisites: 41.223, *corequisite* 69.500.

69.610-611 Statistical Inference I and II (3, 3)

Point estimation; consistency, unbiasedness, efficiency, sufficiency, minimal sufficiency, minimum variance, maximum likelihood, least squares. Confidence, fiducial, Bayesian, and tolerance intervals. Simple and composite hypotheses; power of tests; completeness; similar regions; likelihood ratio tests. Robustness, distribution-free and sequential procedures. Fall. Spring.

Prerequisite: 69.501, *corequisite* 41.574.

69.604-605 Statistical Decision Theory I and II (3, 3)

Convex sets and functions; minimax theorem; statistical games; utility and principles of choice; strategies; complete classes; Bayes procedures; principles of invariance; sequential procedures; related topics. 1967-68 and every third year.

Prerequisite: 41.571, *corequisite* 69.610.

69.620-621 Multivariate Analysis I and II (3, 3)

Multivariate normal distribution Hotelling's T; Wilks' likelihood ratio criterion; other test statistics; classification problems; principal components; canonical correlation; general multivariate regression and experimental designs; related topics. 1966-67 and every third year.

Prerequisites: 41.510, *corequisite* 69.610.

69.670-671 Linear Estimation I and II (3, 3)

General linear hypothesis; least squares estimation: Gauss-Markov theorem; regression; analysis of variance; multiple comparisons; analysis of covariance; factorial designs; randomized blocks; other experimental designs; effects of departures from assumptions. 1967-68 and alternate years.

Prerequisites: 69.501, 41.310, and additional work in matrix algebra.

69.678-679 Stochastic Processes I and II (3, 3)

Distributions; generating functions; random walks; Markov chains; branching processes; Poisson processes; queueing theory; birth and death processes; normal processes; covariance processes; related topics. 1968-69 and every third year.

Prerequisites: 41.570, 41.575, and 69.501.

69.680-681 Advanced Mathematical Statistics I and II (3, 3)

General theory of random variables and probability distributions; advanced topics in theory of sampling and statistical inference. 1966-67 and alternate years.

Prerequisites: 41.571, 41.575, and 69.610.

STATISTICAL METHODOLOGY COURSES

69.514 Methodology I: General (3)

Averages, dispersion, probability, sampling, approach to normality; simple and multiple regression; tests and confidence intervals for means, proportions, differences, regression coefficients; nonparametric statistics; analysis of variance.

Prerequisite: 69.202.

69.515 Methodology II: Regression (3)

Simple and multiple regression; least squares; curve fitting; graphic techniques; tests and confidence intervals for regression coefficients.

Prerequisite: 69.514.

69.516 Methodology III: Design of Experiments (3)

Designing and analyzing results of balanced experiments; simple analysis of variance; components of variance; analysis of covariance; related topics.

Prerequisite: 69.514

69.517 Methodology IV: Sampling (3)

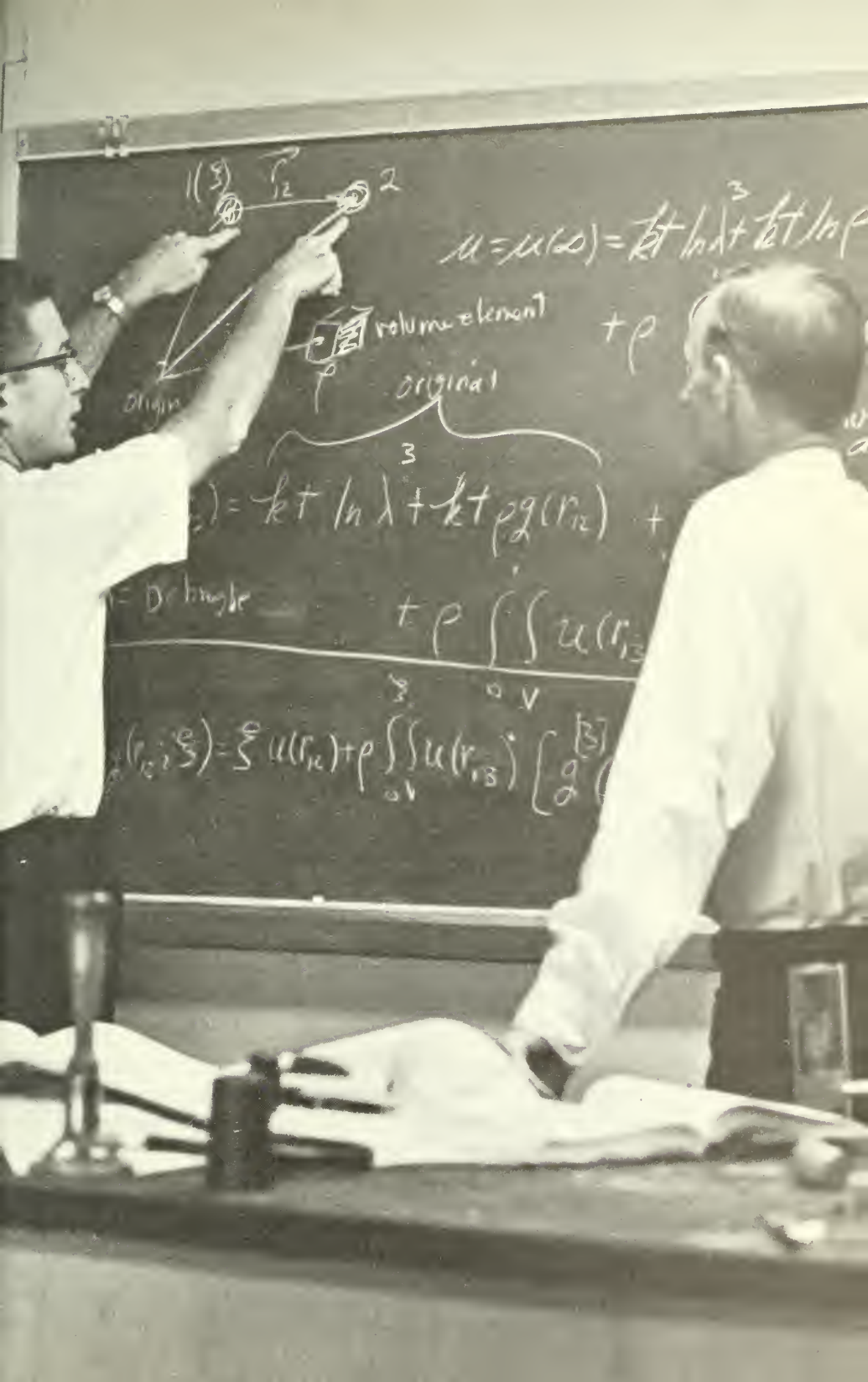
Sampling principles; stratification; alternative methods of selection and estimation; comparisons of accuracy, precision, and cost. Applications: auditing, acceptance inspection, market research, personnel administration.

Prerequisite: 69.514.

69.518 Methodology V: Psychological Statistics (3)

Methods appropriate for analyzing data of psychological research; validity and reliability; regression; analysis of variance and covariance; interval estimates and significance tests; related topics.

Prerequisite: 69.514 or 69.301.



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$$u(r_{12}) = kT \ln \lambda + kT \rho \int \int u(r_{13}) g(r_{13}) dr_{13}$$

Physics

Professors:

MARK HARRISON (*Chairman*)
BANCROFT W. SITTERLY
(*Professor Emeritus*)

Associate Professors:

C. M. DAVIS, JR.
JACEK JARZYNSKI
RICHARD V. WATERHOUSE
JOHN A. WHITE

Assistant Professors:

BENSON T. CHERTOK
PAUL E. DALBEC
GLORIA DE WIT
RICHARD B. KAY
LOUIS LIBELO
ROMEO SEGNAV

Adjunct Professors:

FERNAND D. BEDARD
EARL R. CALLEN
RANDALL S. CASWELL
WILLIAM R. DODGE

UNDERGRADUATE DEGREE

Bachelor of Science

University Requirements See page 28

Composition and Reading	(6 hours)
Physical Education	(4 units—non-credit)
Humanities	(12 hours)
Science and Mathematics are normally satisfied by major and related re- quirements. Consult department	(12 hours)
Social Sciences	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Recommended languages: French, German or Russian

Departmental Requirements Students majoring in physics should register for 51.220-221 Fundamentals of General Physics I and II at the earliest opportunity. Concurrent registration in 41.222-223 Differential and Integral Calculus I and II is required. It is strongly urged these courses be taken in the freshman year if possible. This will necessitate a waiver examination for the 41.110-111 Fundamentals of Mathematics I and II or taking this course

or its equivalent the summer before the freshman year. The normal prerequisites to courses at the 300-level and above are 51.220-221 Fundamentals of General Physics I and II. However, with superior performance, 51.210-211 Elements of General Physics may be substituted provided approval of the departmental advisor is obtained. A grade of C or better is required for all major, tool and related courses.

MAJOR COURSES (43 hours)

- 51.220-221 Fundamentals of General Physics I and II (8)
- 51.222-223 General Physics Laboratory I and II (2)
- 51.330-331 Principles of Mechanics I and II (6)
- 51.450-451 Electricity and Magnetism I and II (6)
- 51.570 Introduction to Quantum Mechanics (3)
- 51.572 Atomic Physics (3)
- 51.573 Nuclear Physics (3) or 51.579 Solid State Theory (3)
- 51.541 Optics (3) or 51.531 Acoustics (3)
- 51.560 Thermodynamics and Statistical Physics (3)
- 51.580-581-582-583 Advanced Physics Laboratory I, II, III, and IV (6)

RELATED COURSES (8-11 hours)

- 15.110-111 General Chemistry I and II (8)
- Three additional hours selected from 47.521 Philosophy of Science (3), or 81.506-507 History of Scientific Thought I and II (3, 3) are recommended.

TOOL COURSES (20-23 hours)

- 41.110-111 Fundamentals of Mathematics I and II (6)
- 41.222-223 Differential and Integral Calculus I and II (8)
- 41.321 Differential Equations (3)
- 51.500 Introduction to Mathematical Physics I (3)
- Students planning to continue on to graduate work in physics are advised to also take 51.501 Introduction to Mathematical Physics II (3)

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Science

General Requirements Minimum of 30 hours of approved graduate work.

Core Courses It is expected that the student will further his training in four areas of physics; mechanics, electromagnetism, thermal and statistical physics, and quantum physics.

It is required that the student's combined graduate and undergraduate programs include:

- 51.630-631 Theoretical Mechanics
- 51.650-651 Electromagnetic Theory
- 51.560 Thermodynamics and Statistical Physics
- 51.570 Introduction to Quantum Mechanics

51.572 Atomic Physics

51.573 Nuclear Physics and/or 51.579 Solid State Physics (see the undergraduate major requirements)

Whenever any of these 500-level courses named above were completed as part of the undergraduate program, it is urged that student include in his graduate program as many as possible of the corresponding graduate courses, i.e., 51.660-661 Statistical and Thermal Physics, and 51.670-671 Quantum Mechanics.

Two hours registration in 51.699 Current Topics in Physics are required.

Thesis Minimum of 3 hours in 51.797 Master's Thesis Seminar or 6 hours in 51.795 Research Training Seminar. The student is required to finish his thesis research within one year after the end of the semester in which the comprehensive examinations were taken. However, this time may be extended if satisfactory progress is demonstrated.

Written Comprehensive Examinations Two approved fields: 51.001 Mechanics and Modern Physics, 51.002 Electromagnetism and Optics, Thermal and Statistical Physics.

Doctor of Philosophy

General Requirements See page 42

Minimum of 72 hours of approved graduate work.

Qualifying Examination It is required that the student take a qualifying examination at an early date after entrance into the doctorate program. Students scoring Distinction on at least one of the M.S. comprehensive examinations, with a high score on the other, may waive the qualifying examination.

Core Courses The student is required to have completed 51.630-631 Theoretical Mechanics I and II (6), 51.650-651 Electromagnetic Theory I and II (6), 51.660-661 Statistical and Thermal Physics (6), and 51.670-671 Quantum Mechanics I and II (6). The student is required to register for two hours of 51.699 Current Topics in Physics.

Language Proficiency in two languages preferably chosen from Russian, German and French. Substitution of a tool of research for one language is permissible.

Dissertation The student is required to register for a minimum of 12 hours dissertation research. The student is required to finish his dissertation in two years. However, this may be extended by petitioning the faculty and demonstrating satisfactory progress.

Oral Examination The student is required to take an oral examination in defense of his dissertation research.

Written Comprehensive Examinations Four examinations from:
51.005 Mechanics and Mathematical Physics
51.006 Quantum Physics and Applications
51.007 Electromagnetic Theory and Optics
51.008 Statistical and Thermal Physics
51.009 Nuclear Physics

UNDERGRADUATE COURSES

- 51.100 The Science of Physics (3)**
Concept of energy and related concepts of physics in fields of mechanics, heat, electricity, radiant energy, nuclear energy. Demonstrations; no laboratory.
- 51.210 Elements of General Physics I (3)**
Mechanics, heat, and sound. Three hours of lecture.
Prerequisite: 41.111.
- 51.211 Elements of General Physics II (3)**
Electricity and magnetism, light, modern physics. Three hours of lecture.
Prerequisite: 51.210.
- 51.220 Fundamentals of General Physics I (4)**
An intensive treatment of mechanics, heat, sound and electrostatics. For students of the physical and mathematical sciences. Three hours of lecture, two hours of recitation.
Prerequisites: 41.222 or concurrent registration.
- 51.221 Fundamentals of General Physics II (4)**
An intensive treatment of electromagnetism, optics, and a survey of modern physics for students of the physical and mathematical sciences. Three hours of lecture, two hours of recitation.
Prerequisites: 51.220; 41.223 or concurrent registration.
- 51.222 General Physics Laboratory I (1)**
Selected experiments to accompany 51.210 and 51.220.
Prerequisites: 51.210 or 51.220 or concurrent registration.
- 51.223 General Physics Laboratory II (1)**
Selected experiments to accompany 51.211 and 51.221.
Prerequisites: 51.211 or 51.221 or concurrent registration.
- 51.330 Principles of Mechanics I (3)**
Vector analysis, dynamics and kinematics of particles, moving reference systems, central forces and celestial mechanics, dynamics of system of particles, planar rigid body mechanics.
Prerequisites: 51.221; 41.321 or concurrent registration.
- 51.331 Principles of Mechanics II (3)**
General mechanics of rigid bodies. Lagrange's and Hamilton's equations (of motion), vibration theory and normal modes, wave propagation and boundary value problems, special theory of relativity.
Prerequisite: 51.330, 41.321.
- 51.410 Special Topics Laboratory (1)**
Selected experiments to accompany intermediate courses in mechanics, heat, acoustics, optics, and modern physics. Individual assignments. Three hours of laboratory.
Prerequisite: permission.
- 51.450 Electricity and Magnetism I (3)**
Vector analysis, electrostatic fields, potential theory and boundary value problems, dielectric media, direct current circuits, magnetic fields, magnetic media, electromagnetic induction.
Prerequisites: 51.221; 41.321 or concurrent registration.
- 51.451 Electricity and Magnetism II (3)**
Alternating current circuits and transmission lines, Maxwell's equations, propagation of electromagnetic waves, boundary value problems, guided waves, generation of electromagnetic waves and antennas.
Prerequisites: 51.450, 41.321.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600- and 700-level courses are open only to graduate students.)

51.500 Introduction to Mathematical Physics I (3)

The following topics will be related to various areas of physics: differential equations, infinite series, scalar and vector fields, curvilinear coordinates, matrices and tensors, Fourier series, and partial differential equations.

Prerequisites: 51.331, 51.451, 41.321.

51.501 Introduction to Mathematical Physics II (3)

The following topics will be related to various areas of physics: special functions of mathematical physics and boundary value problems, Fourier and Laplace transforms, Sturm-Liouville theory, Green's functions, variational methods, complex variable and contour integration, and probability theory.

Prerequisite: 51.500.

51.531 Acoustics (3)

Vibrating systems, dynamical analogies. Transients and random noise. Wave propagation in strings, membranes, bars, and fluids. The wave equation and its solution in one, two and three dimensions. Radiation, reflection, refraction and diffraction.

Prerequisites: 51.500 or concurrent registration.

51.541 Optics (3)

Maxwell's equations and electromagnetic waves, reflection and refraction, interaction of light with matter, interference phenomena. Huygen's-Kerchoff diffraction theory, Fresnel and Fraunhofer diffraction, gratings, optical instruments.

Prerequisites: 51.331, 51.451.

51.554 Principles of Electronics (3)

Circuit analysis, circuit theorems, physics of vacuum tubes and transistors, equivalent circuits. Analysis of power supplies, amplifiers and oscillators. Modulation, demodulation and pulse circuits.

Prerequisites: 51.451, 51.581, and 41.321.

51.560 Thermodynamics and Statistical Physics (3)

Heat, temperature, the first and second laws of thermodynamics, cycles, reversibility, entropy changes, and the thermodynamic potentials. Kinetic theory and transport phenomena. Statistical interpretation of thermodynamics, definition of entropy, Maxwell-Boltzman, Bose-Einstein, and Fermi-Dirac statistics.

Prerequisite: 51.572.

51.570 Introduction to Quantum Mechanics (3)

The historical background to quantum mechanics, particles and waves, the Schroedinger equation, potential barriers and potential wells, the simple oscillator, the one-electron atom, angular momentum, eigenfunctions, eigenvalues, and degeneracies.

Prerequisites: 41.321; 51.331 and 51.451 or concurrent registration.

51.572 Atomic Physics (3)

Review of elementary quantum mechanics, time dependent and time independent perturbation theory, magnetic moments, spin, identical particles and the exclusion principles, multielectron atoms, transition rates and selection rules, interaction of radiation with matter.

Prerequisite: 51.570.

- 51.573 Nuclear Physics (3)**
 Charge, radius, mass, moments, statistics and parity of nuclei; nuclear transitions, systematics of stable nuclei, nuclear binding energy, nuclear forces and models of nuclei.
Prerequisite: 51.572.
- 51.579 Solid State Theory (3)**
 Elements of crystallography, lattice dynamics, specific heat and thermal properties, cohesive energy, dielectric and magnetic properties of insulators, band theory, semiconductors, metals, the theory of defects in solids.
Prerequisites: 51.572; 51.560 or concurrent registration.
- 51.580 Advanced Laboratory I (1)**
 Selected experiments in electrical measurements. Three hours of laboratory.
Prerequisites: 51.223; 51.450 or concurrent registration.
- 51.581 Advanced Laboratory II (1)**
 Selected experiments in electrical measurements and modern physics. Three hours of laboratory.
Prerequisites: 51.580; 51.451 or concurrent registration.
- 51.582 Advanced Laboratory III (2)**
 Selected experiments in atomic physics, optics, electronics, acoustics, and machine shop practice. Three hours of laboratory.
Prerequisites: 51.581; 51.541, 51.572 or concurrent registration.
- 51.583 Advanced Laboratory IV (2)**
 Selected experiments in electronics, optics, atomic and nuclear physics, and machine shop practice. Three hours of laboratory.
Prerequisites: 51.572; 51.573 or 51.579 or concurrent registration.
- 51.599 Physics Seminar (1)**
 Group study and discussion of selected areas in physics. Topics to be announced. May be repeated for credit.
Prerequisite: permission of instructor.
- 51.600 Mathematical Physics (3)**
 Linear vector space and function space; integral equations and transform methods, calculus of variations, Sturm-Liouville theory and Green's functions.
Prerequisite: 51.501.
- 51.630 Theoretical Mechanics I (3)**
 Theoretical treatment of the general principles of mechanics, conservation theorems, Lagrange's equations and generalized coordinates, variational calculus and Hamilton's principle, matrices and tensors, rigid body dynamics, Hamiltonian mechanics.
Prerequisites: 51.331; 51.500 or concurrent registration.
- 51.631 Theoretical Mechanics II (3)**
 Hamilton's equations and canonical transformations, Hamilton-Jacobi theory, vibration theory and normal coordinates, transition to the mechanics of continuous media, elasticity and the stress-strain tensors, fluid mechanics.
Prerequisite: 51.630.
- 51.634 Waves and Vibrations (3)**
 Mathematical theory of waves and vibrations, boundary value problems of radiation, scattering and diffraction. Green's function and integral transforms, perturbation and variational methods.
Prerequisites: 51.501 or concurrent registration.

- 51.650 Electromagnetic Theory I (3)**
Electrostatics, potential theory, boundary value problems and Green's functions, dielectric media, magnetic fields and magnetic-media, Maxwell stress tensor, general theorems of momentum and energy, Maxwell's equations.
Prerequisites: 51.451, 51.501.
- 51.651 Electromagnetic Theory II (3)**
Electromagnetic waves and boundary value problems, guided waves, scattering theory, radiation theory, diffraction theory, eikonal and WKB methods, advanced physical optics.
Prerequisite: 51.650.
- 51.654 Relativistic Theory (3)**
Experimental basis for special relativity, relativistic kinematics and the Lorentz transformation, relativistic mechanics, covariant electrodynamics, Lienard-Wiechert potentials. Bremsstrahlung electrodynamic conservation laws, charged particle collisions and other applications.
Prerequisites: 51.631, 51.651.
- 51.660 Statistical and Thermal Physics I (3)**
Principles and applications of classical thermodynamics. Fluctuations and irreversible thermodynamics. Classical statistical thermodynamics.
Prerequisites: 51.560; 51.630 or concurrent registration.
- 51.661 Statistical and Thermal Physics II (3)**
Statistical ensembles. MB, BE, and FD statistics. Application to perfect gases. Method of Darwin-Fowler. Properties of crystals. Cooperative phenomena. Real gases.
Prerequisites: 51.660, 51.572.
- 51.670 Quantum Mechanics I (3)**
The experimental background to quantum mechanics, the Schroedinger equation, eigenfunctions and eigenvalues, the harmonic oscillator, the square well, the hydrogen atom, scattering.
Prerequisites: 51.572, 51.501, 51.631; 51.650 or concurrent registration.
- 51.671 Quantum Mechanics II (3)**
The matrix formulation of quantum mechanics, approximate methods, angular momentum and spin, radiation, applications to atoms, molecules, and solid state.
Prerequisite: 51.670.
- 51.672 Advanced Quantum Mechanics I (3)**
Lorentz group. Relativistic and particle quantum mechanics of spin 0 and spin $\frac{1}{2}$ particles. Electromagnetic interactions, Feynman propagations, S-matrix, Feynman diagrams, and various applications.
Prerequisites: 51.671; 51.654 or concurrent registration.
- 51.673 Advanced Quantum Mechanics II (3)**
Lagrangian field theory, quantization of free fields, interactions and covariant perturbation theory. Quantum electrodynamics: renormalization, radiative corrections in scattering. Lamb shift.
Prerequisite: 51.672.
- 51.676 Nuclear Theory I (3)**
Internucleon forces, moments and shapes, shell model, nuclear coupling schemes, nuclear matter problems and collective nuclear motions.
Prerequisites: 51.573 and permission.

51.677 Nuclear Theory II (3)

Electromagnetic properties of nuclei, beta decay, theory of nuclear reactions including collision matrix and dispersion theory, compound nucleus and statistical theories, optical model, and direct reactions.

Prerequisite: 51.676.

51.678 Advanced Solid State Physics I (3)

Crystal lattices and groups, thermal, electric, and magnetic properties of solids, free-electron and band theory of metals and semiconductors, law temperature phenomena.

Prerequisite: 51.671 or permission.

51.679 Advanced Solid State Physics II (3)

Lattice vibrations, order-disorder transformations, phonon-electron interactions, quantum theory of ferromagnetism and relaxation phenomena.

Prerequisite: 51.678.

51.681 Quantum Electronics (3)

Quantum properties of atoms and light, linear and non-linear interactions between coherent light and matter, theory of light amplifiers and oscillators (lasers).

Prerequisites: 51.541, 51.572.

51.699 Current Topics in Physics (1)

Weekly seminar on recent advances in physics as reported by the current literature. Presentations will alternate between graduate students and invited speakers. Compulsory for all degree candidates.

51.790 Research Seminar in Physics (3-6)

Various topics in advanced physics with contents selected according to need.

Prerequisite: permission.

51.795 Research Training Seminar (3-6)

51.797 Master's Thesis Seminar (3-6)

51.799 Doctoral Dissertation Seminar (3-6)

Inter-Departmental Science Program

Professor:

LEO SCHUBERT, *Co-ordinator*

Faculty of the Departments of Biology, Chemistry, Earth Sciences, Mathematics, and Physics.

UNDERGRADUATE DEGREE Bachelor of Science in Distributed Science

The University offers a program leading to the degree of Bachelor of Science with a major in Distributed Sciences for students who plan to teach the natural sciences in secondary schools or who wish to receive a broader background in science at the undergraduate level than is afforded by the usual Bachelor of Science degree. The degree is also planned to meet pre-medical and pre-dental requirements of most medical and dental schools. Students majoring in distributed sciences select their major courses primarily from offerings in the fields of biology, chemistry, earth sciences, mathematics, and physics; pre-medical and pre-dental students are advised to elect certain courses in psychology for their fourth science. Students interested in a program in distributed sciences should consult the chairman of the science department in which they select the 24 hours of major courses. The chairman of that department will assign an adviser early in the program. A minimum of 60 approved hours in the combined natural science/mathematics major and related courses must be completed to qualify for the degree of Bachelor of Science in Distributed Sciences.

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics are normally satisfied by major and related requirements. Consult division chairman or appropriate department.	
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Intellectual Requirements **MAJOR COURSES** (24 hours)
At least 24 hours in one of the following: Biology, Chemistry, Earth Sciences, Mathematics or Physics.

RELATED COURSES (36 hours)
Twelve hours in one additional science and eight hours in each of two additional sciences. (Where mathematics and/or psychology is selected certain courses are specified.) Eight additional hours needed to satisfy the university science requirements.

TOOL COURSES (6 hours)
41.110, 41.111 Fundamentals of Mathematics I and II.

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREE

Master of Science in Science Teaching

Administered under the joint supervision of the Division of Natural Sciences and Mathematics and the Department of Education. Students interested in the M.S.S.T. program should consult the chairman of the science department in which they will take their major. The chairman of that department will assign an adviser.

Course Requirements Minimum of 30 hours of approved graduate work with six or more hours taken in the major field. The student's undergraduate and graduate courses in the major field must total a minimum of 32 credit hours. Other requirements include:

- (a) a minimum of eight hours in a second science field,
- (b) one year of college mathematics (algebra and analytic geometry or equivalent) taken either before entering the M.S.S.T. program or as non-credit courses along with the courses taken for graduate credit
- (c) a course in either history or philosophy of science (3), and
- (d) six hours of graduate courses in education.

A limited number of courses (not to exceed 12 hours) from the 300 to 400 level may be used toward the requirements of this degree. These courses may be selected from:

9.321	15.320-321	27.341-342	41.474
9.332	15.350-351	41.310	51.330-331
9.335	15.400-401	41.312	51.410
9.341	15.460-461	41.321	51.450-451
9.356	27.321-322	41.322	
15.310-311	27.331-332	41.440	

Written Comprehensive Examinations Three, including two fields in the natural sciences and one field in education.

Divisional Courses

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600- and 700-level courses are open only to graduate students.)

81.506 History of Scientific Thought I (3)

History of major scientific concepts. Covers the Greek Science, the Transition Period, Science in the Scholastic Period, the Galileo Period, and the Newtonian Period. Primarily Biological and Physical Sciences.

81.507 History of Scientific Thought II (3)

Scientific concepts since the Newtonian Period, the Franklin Period, the 19th century, and the 20th century to the present time. Continuation of 81.506. Either or both semesters may be taken for credit.

Hospital Training Program

WASHINGTON HOSPITAL CENTER

SUMNER O. BURHOE, *Coordinator*

The University provides the academic courses for students enrolled in the three year diploma program of the Washington Hospital Center. The schedule of courses is as follows:

- 45.101 Basic Physical Science (4)
- 45.102 Basic Biological Science (5)
- 45.105 Human Growth and Development (3)
- 23.100 Composition and Reading I (3)
- 23.101 Composition and Reading II (3)
- 57.200 General Psychology (3)
- 65.200 Introduction to Sociology (3)
- 21.320 Psychology of Education (3)
- 53.150 The U.S. Political System I (3)
- 19.100 Introduction to Economics I (3)

DIVISION OF SOCIAL SCIENCES

Anthropology

Professors:

GORDON MACGREGOR
(*Acting Chairman 1967-68*)
HARVEY C. MOORE
(*Chairman. On leave 1967-68*)
ABSOLON VILAKAZI

Associate Professors:

GEORGE L. HARRIS
(*SIS. On leave 1967-68*)
Adjunct Professor:
BELA C. MADAY
Assistant Professors:
LUYSE KOLLNHOFFER

RUTH H. LANDMAN
CHARLES W. MCNETT, JR.
Professorial Lecturer:
LUCILE E. ST. HOYME
Lecturer:
CAROL JOPLING

UNDERGRADUATE DEGREE

Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics	(12 hours)

Recommended course:

Two semesters of approved laboratory science (8 hours).

Social Sciences are normally satisfied by major and related requirements. Consult department (12 hours).

Language Requirement	Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.
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Departmental Requirements MAJOR COURSES

Introductory Courses (6 hours)

3.201 Introduction to Cultural Anthropology and 3.202 Introduction to Physical Anthropology and Archeology.

Courses at 300 or Above Level (33 hours)

37.300 Introduction to Language

3.330 Human Evolution or 3.331 Variation in Man

3.332 Old World Prehistory or 3.333 New World Prehistory

3.335 Ethnographic Survey

3.536 History of Anthropology

and 18 hours of electives in Anthropology, at the 300 level or above, to be chosen in consultation with departmental adviser.

The student may count other courses in Linguistics offered by the Department of Languages and Linguistics if his department adviser approves.

RELATED COURSES

Introductory Courses (9 hours)

65.200 Introduction to Sociology, 57.200 General Psychology, and 69.202 Basic Statistics.

Courses at 300 or Above Level (12 hours)

Chosen in consultation with departmental adviser. Must include 6 hours in Sociology.

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts

Course Requirements Minimum of 30 hours of approved graduate work including at least two courses on the 500 or 700 level, plus 3.797 Master's Thesis (3-6 hours)

Written Comprehensive Examinations Two, including one in the general history of anthropological theory and method; one in a specialized field of anthropology or an approved related field.

Other Requirements Thesis and oral defense of thesis.

Examination Fields CORE FIELD

Graduate Comprehensive 3.006 History of Anthropological Method and Theory

SPECIALIZED FIELDS

3.016 Ethnology and Social Anthropology	3.019 Archeology (Old World Prehistory)
3.017 Ethnography (a specified area)	3.020 Archeology (New World)
3.018 Linguistics	3.021 Physical Anthropology
	3.022 Cultural Area Analysis (with emphasis on specified area)
	3.023 Language and Cultural Analysis

UNDERGRADUATE COURSES

3.201 Introduction to Cultural Anthropology (3)

An introduction to the comparative study of culture content, cultural behavior, language in its cultural role; theories of culture and of culture change.

3.202 Introduction to Physical Anthropology and Archeology (3)

An introduction to the comparative study of man's biological development as seen in evolution, modern varieties of man, and the underlying genetic principles. The role of archeology in anthropology; survey of concepts and methods for studying prehistoric societies.

3.330 Human Evolution (3)

Study of the topic of variation in the primates and early man in evolutionary and ecological perspective.

Prerequisite: 3.202 or permission.

- 3.331 Variation in Man (3)**
Study of the topic of variation in *homo sapiens* by race, age, sex and environment.
Prerequisite: 3.202 or permission.
- 3.332 Old World Prehistory (3)**
Study of major cultural sequences in the Old World as revealed by archeologists.
- 3.333 New World Prehistory (3)**
Study of major cultural sequences in the New World as revealed by archeologists.
- 3.335 Ethnographic Survey (3)**
A survey of diverse societies to examine the role of political, economic, social, and religious systems within total cultural patterns. Societies will be on various levels of complexity and from various areas of the world.
Prerequisite: 3.201.
- 3.430 Primitive Religions (3)**
Varieties of religious experiences and expressions, exclusive of the great world religions. Role of religion in influencing behavior and in integrating particular societies, and cultures.
Prerequisite: 3.201.
- 3.431 Primitive Social Organization (3)**
Analysis of systems of organization of individuals into groups. Special attention to criteria of kinship and association. An examination of the functional pre-requisites and requisites of a society and of law and political control in human groups.
Prerequisite: 3.201.
- 3.432 Primitive Economics (3)**
The structure and operation of the small scale non-Western economy and its place in the cultural system.
Prerequisite: 3.201.
- 3.433 Primitive Art (3)**
The visual arts in cultural context in Africa, Oceania, and North American primitive societies.
Prerequisite: 3.201 or permission.
- 3.434 Community Studies (3)**
Anthropological approaches to the study of the community. The contributions of community studies to method and theory. Changing patterns of community life within developing nations.
Prerequisite: 3.201.
- 3.439 Research Methods (3)**
Survey of basic techniques in the collection and analysis of anthropological data. Student participation in fieldwork and laboratory analysis may be required. Different semesters deal with archeology, ethnology, linguistics, or physical anthropology. May be repeated for credit if no duplication is involved.
Prerequisite: permission of the instructor.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates, 600- and 700-level courses open only to graduate students.)

- 3.520 New World Archeology I: Lithic and Archaic (3)**
Intensive comparative analysis of New World cultures at the Lithic and Archaic stages.
Prerequisite: 3.333 or permission.

- 3.521 New World Archeology II: Food Producing Peoples (3)**
Intensive comparative analysis of New World cultures at the Formative and Classic stages.
Prerequisite: 3.333 or permission.
- 3.523 Old World Archeology I: Paleolithic and Mesolithic (3)**
Intensive comparative analysis of Old World cultures at the Paleolithic and Mesolithic stages.
Prerequisite: 3.332 or permission.
- 3.524 Old World Archeology II: Beginnings of Civilization (3)**
Intensive comparative analysis of Old World cultures at the Neolithic and Urban stages.
Prerequisite: 3.332 or permission.
- 3.532 Culture Change (3)**
Dynamics of culture. Growth, development, stability in culture content, form, organization. Acculturation and nativistic movements. Assimilation and integration of ethnic groups.
Prerequisite: 3.201, and one additional course in cultural anthropology.
- 3.534 Cultural Analysis (3)**
An anthropological approach to an understanding of problems of cross-cultural relations and of individual adjustments to and appreciation of societies with different cultures. Open only to non-majors who have had no other courses in cultural anthropology.
- 3.535 Cultural Influences Upon the Individual (3)**
Examination of studies in Psychological Anthropology. Interactions of culture and the thoughts, emotions, and actions of the individual. The resulting cultural patterns and configurations.
Prerequisite: 3.201, 3.335 and 57.200.
- 3.536 History of Anthropology (3)**
Development of systematic theory, techniques and methods, and anthropological exploration in ethnology, archeology, physical anthropology and linguistics.
Prerequisite: a course in each of the four divisions of Anthropology.
- 3.537 Language and Culture (3)**
Cross-cultural consideration of language structure and behavior in relation to the rest of culture and to problems of culture pattern and change.
Prerequisite: 3.201 or 3.534; 37.300 or 37.500.
- 3.539 Culture Area Analysis (3)**
A selected culture area will be analyzed in terms of process function, structure and development. Different semesters deal with Sub-Saharan Africa; Europe; Far East; Near East; South or Southeast Asia; North, Middle, or South America; Oceania; etc. May be repeated for credit if no duplication is involved.
Prerequisite: 3.201 or 3.534, or permission.
- 3.731 Seminar: Problems in Anthropology (3)**
Intensive analysis of selected theoretical and methodological problems in one of the four fields of anthropology. May be repeated for credit if no duplication is involved.
Prerequisite: permission of instructor.
- 3.732 Seminar: Advanced Anthropological Research (3)**
Application of research methods in the collection and analysis of basic data, with emphasis on the anthropological interpretation of these materials. May be repeated for credit if no duplication is involved.
Prerequisite: permission of instructor.
- 3.797 Master's Thesis Seminar (3-6)**

Economics

Professors:

W. DONALD BOWLES, (*Dean of
College of Arts and Sciences*)
ERNST CORRELL (*Emeritus*)
MARVIN L. FAIR (SBA)
WARREN S. HUNSBERGER
FRITZ KARL MANN (*Emeritus*)
SIMON NAIDEL (*Emeritus*)
NIKOS G. PHOTIAS (SBA)
FRANK M. TAMAGNA

Associate Professors:

PAMELA H. KACSER
CYNTHIA TAFT MORRIS
JAMES H. WEAVER (*Chairman*)
CHARLES K. WILBER

Assistant Professor:

RICHARD H. PUCKETT

Instructors:

W. MICHAEL BAILEY
P. GAIL ELLIS
NANCY BARRETT

Adjunct Professors:

EDWARD L. ALLEN
NICHOLAS ANAGNOS

Professorial Lecturers:

ARTHUR ASHBROOK
GEORGE N. ECKLAND
RUSH GREENSLADE
ELINOR H. SOLOMON
VIRGIL NORTON

UNDERGRADUATE DEGREE

Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics	(12 hours)

Recommended course:

41.100 Survey of Mathematics I
or 41.110

Fundamentals of Mathematics I

Social Sciences are normally satisfied

by major and related requirements. (12 hours)

Language Requirement	Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.
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Departmental Requirements	MAJOR COURSES (30 hours)
	<i>Substantive Courses</i> (24 hours)

19.100 Introduction to Economics I (3) *
19.101 Introduction to Economics II (3)
19.300 Intermediate Economic Analysis: Price (3)
19.301 Intermediate Economic Analysis: Income (3)
19.303 Landmarks of Economic Theory (3)
19.306 Money and Banking (3)

19.308 American Economic Development (3)

19.311 International Economics (3)

Quantitative Courses (6 hours)

69.202 Basic Statistics 2, semesters of calculus or 19.305 Introduction to Quantitative Economics (3) for those who do not wish to take calculus.

RELATED COURSES (12 hours)

Advanced work selected from the following fields, with not more than 9 hours in any one: anthropology, business administration, education, government, history, international relations, mathematics, philosophy, psychology, public administration, sociology.

Note: Grade of C or better is required in all major tool and related courses. Students planning to continue on to graduate work in economics are advised to take mathematics as a related field.

TOOL COURSES

See quantitative courses above.

Electives To complete minimum of 120 hours plus non-credit physical education. It is suggested that the entire last semester of the senior year be composed of electives. All 500-level courses in the department are open to undergraduates with the necessary prerequisites. In general a student should not use his electives entirely in his own field, but should strengthen his overall educational program. At least 18 hours of electives must be at the 300-level or above. For some purposes, 10.306-307 Accounting I and II are useful electives.

GRADUATE DEGREE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts

Admission See page 38

The Graduate Record Examination is recommended. (In general an overall grade point average of B (2.0) in the last two years of undergraduate work is required.)

Course Requirements Minimum of 30 hours of approved graduate work. Students must complete 19.797 Master's Thesis Seminar (6) or two non-thesis seminars with a grade of B or better (3, 3).

Written Comprehensive Examinations Two, including one in contemporary economic theory, and one in a specialized field of economics. See the departmental information sheet on suggested minimal course preparation for the individual comprehensive fields.

Other Requirements All students must have taken in the recent past a basic course in statistics and a basic course in quantitative economics. Lacking such courses, the student will normally take 69.202 Basic Statistics and 19.305 Introduction to Quantitative Economics for no credit, inasmuch as these are

undergraduate courses, although the student must earn a grade of C or better in each course. In addition, either a second course in undergraduate statistics (69.300 Business Statistics) or a graduate course (69.514 Methodology I: General) is required. All qualified students are urged to take 19.521 Quantitative Economic Analysis as part of their regular program. Tool courses must be completed early in the graduate program.

Doctor of Philosophy

Admission See page 42

The Graduate Record Examination is recommended.

Course Requirements See page 42

Minimum of 72 hours of approved graduate work, including 19.799 Doctoral Dissertation Seminar (12).

Written Comprehensive Examinations Four at a minimum, including one in contemporary economic theory and its development (given in two parts—macro and micro), one in history of economic development, one in a specialized field of economics, and one other in a specialized field of economics or in a related field. The related field must be chosen with the approval of the department chairman on the advice of the student's departmental adviser and the department in which courses in the related field are given. See the departmental information sheet for suggested minimal course preparation for individual comprehensive fields.

Other Requirements Proficiency in two research tools (one modern foreign language and statistics or mathematics); the foreign language will normally be that in which a significant body of literature in the student's major field lies. Dissertation and oral defense of dissertation. All students must have completed a graduate course in quantitative economics (19.521) at this University. All students must take one course in the field of History of Economic Thought (19.701).

Tool of Research The tool of research requirement in statistics may be satisfied by:

- Requirement in Statistics**
1. Passing an appropriate examination (announced at a given date each semester).
 2. Completion of two appropriate courses together with their prerequisites with average grade better than C (These currently include the five courses 69.514-518 Methodology I-V).
 3. Completion of a program equivalent to those permitted under (2) above.

Tool of Research Requirement in Mathematics A proficiency examination based on the following courses should be passed to satisfy the mathematics tool of research requirement: 41.222 and 41.223 Differential and Integral Calculus I and II, and 41.310 Linear Algebra.

Graduate Comprehensive Examination Fields

- 19.001 Contemporary Economic Theory (required of M.A. and Ph.D. students)
- 19.002 History of Economic Thought
- 19.005 History of Economic Development (required of Ph.D. students)
- 19.007 Economic Growth and Development
- 19.008 Labor Economics

- 19.009 International Economics
- 19.011 Comparative Economic Systems
- 19.012 The Soviet Economy
- 19.013 Monetary Economics
- 19.014 Public Finance and Fiscal Policy
- 19.016 Mathematical Economics (may not be taken with 19.017)
- 19.017 Econometrics (may not be taken with 19.016)
- 19.01A Contemporary Economic Theory—General
- 19.01B Contemporary Economic Theory—Price
- 19.01C Contemporary Economic Theory—Income

UNDERGRADUATE COURSES

- 19.100 Introduction to Economics I (3)**
Institutional framework. Fundamental aggregative relationships of income, consumption, investment. Includes resources, economic growth, public and private finance, national income, business cycles, national economic policy. Offered every semester.
- 19.101 Introduction to Economics II (3)**
Elementary theory of price, forms of imperfect competition, income distribution, public policy, international economics, economic development, comparative economic systems.
Prerequisite: 19.100. Offered every semester.
- 19.300 Intermediate Economic Analysis: Price (3)**
Theory of relative prices of commodities and productive services under perfect and imperfect competition. The theory of the firm and the theory of consumer demand.
Prerequisite: 19.101. Offered Fall and Spring Semesters.
- 19.301 Intermediate Economic Analysis: Income (3)**
Basic concepts and theory of income, employment and economic growth.
Prerequisite: 19.101. Offered Fall and Spring Semester.
- 19.302 Business Cycles (3)**
Historical and theoretical analysis of the fluctuations in economic activity. An introduction to dynamic economics.
Prerequisite: 19.101.
- 19.303 Landmarks of Economic Theory (3)**
History of the development of economic thought as exemplified by the writings of Smith, Ricardo, Mill, Marx, Marshal, Veblen, Keynes; historical settings in which their ideas developed.
Prerequisite: 19.101. Offered Fall semester.
- 19.304 Labor Economics (3)**
Labor markets and wage structure. Collective bargaining. Wage theories and policies. Labor productivity, real wages, income, employment, unemployment, comparative labor problems.
Prerequisite: 19.101. Offered Spring semester.
- 19.305 Introduction to Quantitative Economics (3)**
Selected topics from analytical geometry, calculus, linear algebra statistics, and their application to problems in economic research and analysis.
Prerequisites: 41.100 and 19.101. Offered Fall and Spring semester.
- 19.306 Money and Banking (3)**
Role of money and credit in the economy. The structure of the money market. Structure and operations of commercial banks. The Federal Reserve System and instruments and processes of monetary policy. Introduction to monetary theory.
Prerequisite: 19.101. Offered every semester.

19.307 Economic Development (3)

Theories of Economic growth (Classical, Marxian, Schumpeterian, Keynesian, etc.) Simple growth models, agriculture, population problems, development planning.

Prerequisite: 19.101. Offered Fall semester.

19.308 The Economic Development of the United States (3) (formerly American Economic Development)

A study of long term trends in the U.S. economy. The transplantation of economic institutions from Western Europe, the basic pattern of development, trends in productivity, wages, prices, national income, savings, investment, and capital formation.

Prerequisite: 19.101. Offered Spring semester.

19.309 Economics of Public Finance (3)

Principles of budgeting, public spending, debt management, fiscal policy. Comparative survey of fiscal institutions in the U.S. and abroad.

Prerequisite: 19.101.

19.311 International Economics (3)

Basic factors in the functioning of the world economy, economic principles underlying international trade, international payments, determination of exchange rates, and capital transfer.

Prerequisite: 19.101. Offered Fall and Spring semesters.

ADVANCED COURSES

(500-level courses are open to graduate students and qualified advanced undergraduates; 700-level courses are open only to graduate students.)

GENERAL ECONOMIC THEORY

19.701 Economic Thought I (3)

The major figures in the history of economic thought in terms of both their general, social and economic thought and the tools of analysis they created.

Prerequisites: 19.300, 19.301, 19.303. Offered Fall semester.

19.702 Economic Thought II (3)

Special topics in the history of economic thought, with emphasis on topics rather than men.

Prerequisite: 19.701.

19.703 Price Analysis I: Price and Production (3)

The theory of demand. The theory of production and distribution. The theory of supply.

Prerequisite: 19.300. Offered Fall semester.

19.704 Price Analysis II: Income Distribution (3)

Market equilibrium. General equilibrium. Welfare economics. Models in imperfect competition. Optimization over time.

Prerequisite: 19.703. Offered Spring semester.

19.705 Income Theory I (3)

The Keynesian model of income determination. Detailed study of consumption, investment and interest rate theories. The Keynesian and Classical systems compared.

Prerequisites: 19.301 and 19.306 or permission. Offered Fall semester.

19.706 Income Theory II (3)

Theories of aggregate income distribution. Theories of inflation. Dynamic

models, including business cycle and growth theories. Forecasting with aggregate models. Theory of social accounting.

Prerequisite: 19.705. Offered Spring semester.

ECONOMIC HISTORY

19.707 Economics of American Development (3)

A statistical and analytical investigation of long-run behavior of national income, population, savings, investment, consumption, labor productivity, and other factors affecting economic growth in the U.S. The problem of social control of the growth rate. The concepts of dual economy and balanced growth.

Prerequisite: Permission. Offered Fall semester.

19.708 European Economic Development (3)

Origins and development of capitalism in the Western world, with emphasis on Britain. Emphasis is placed on economic theory to illuminate the process of historical development.

Prerequisite: Permission. Offered Spring semester.

ECONOMIC DEVELOPMENT

19.761 Theory of Economic Development (3)

Patterns, theories and models of economic development of advanced and underdeveloped economies. Some historical theories and approaches to economic development. Theoretical concepts and issues in development planning.

Prerequisite: Permission. Offered Fall semester.

19.762 Current Problems of Economic Development (3)

Trends in living standards, economic planning programs, capital formation, industrial-agricultural techniques, monetary and fiscal structures, income distribution, foreign trade of underdeveloped countries.

Prerequisites: 19.307 or 19.761. Offered Spring semester.

AREA STUDIES

19.551 Economic Problems of Advanced Countries (3)

Economic problems and policies of the OECD countries, including Western Europe, Japan and Canada, their economic and financial organizations, their interrelations and relations with the U.S. and with the rest of the world.

Prerequisite: 19.307.

19.554 Economic Problems of South and Southeast Asia (3)

Economic structure, trends, problems and policies in the area from Pakistan to the Philippines and Indonesia. In 1968 will focus especially on the economy of Indonesia.

Prerequisite: Permission of Instructor. Offered Spring semester.

19.555 Economic Problems of Latin America (3)

Economic geography, population, government organization, public finance and monetary policy, foreign trade, balance of payments, foreign investments, prospects of economic advancement.

Prerequisite: 19.307. Offered Fall semester.

19.557 Economic Problems of Near East and Africa (3)

Human and natural sources, social problems, the non-monetized sector, government organization, public finance and monetary policy, foreign trade, balance of payments, foreign investments, prospects of economic advancement.

Prerequisite: 19.307.

19.559 Patterns and Problems of Economic Development in Asia (3) (formerly 19.787)

Study, comparison and contrast of the different approaches, experiences and problems of economic development in Japan, China, India and Southeast

Asia, with special emphasis on the Meiji Period in Japan, and the period since World War II elsewhere. Discussion and supervised research.

Prerequisite: Permission of Instructor. Offered Fall semester.

ECONOMIC STATISTICS

19.521 Quantitative Economic Analysis (3)

Intermediate mathematical analysis of economic phenomena, elements of model building, game theory, and linear programming.

Prerequisite: 19.305 or permission. Offered Fall semester.

19.522 Social Accounting (3)

Social accounting systems and their uses, as employed in economic analysis; Methods used for measuring and analyzing national income. Input-output techniques, flow of funds, international balance of payments. Consumer expenditures, savings and wealth.

Prerequisites: 19.300 and 19.301.

19.523 Econometrics I (3)

A review of regression analysis and statistics, testing of hypotheses, a rudimentary treatment of the problem of aggregation, identification, multicollinearity and serial correlation; sources of economic data; an examination of some literature on testing of economic models; introduction to the use of computers in economics.

Prerequisite: 19.521. Offered Spring semester.

19.721 Mathematical Economics (3)

Application of mathematical methods to the study of economics. Advanced study of static and dynamic models.

Prerequisites: 19.521, 41.222 & 41.223, 41.310 or permission.

19.722 Econometrics (3)

Advanced quantitative analysis. Construction of stochastic economic models. Problems of specification, estimation, verification and prediction.

Prerequisites: 19.521, 41.222 & 41.223, 41.310 or permission.

ECONOMIC SYSTEMS

19.552 Structure and Operation of the Soviet Economy (3)

Rate of economic growth, changing structure of economy with emphasis on period since 1928. Conditioning factors. Planning techniques and procedures. International economic relations.

Prerequisite: 19.101. Offered Spring semester.

19.556 Economic Problems of the Soviet Union (3)

Economic geography, population, government organization, public finance and monetary policy, foreign trade, balance of payments, foreign investments, prospects of economic advancement.

Prerequisite: 19.552.

19.558 Comparative Economic Systems (3)

Principles governing pricing, income distribution, productivity, investment, economic stability, growth under various forms of social, political, and economic organization.

Prerequisite: 19.101. Offered Spring semester.

MONEY, CREDIT AND BANKING

19.531 Financial Markets in Advanced Economies (3)

Nature and functions of money and capital markets, their sectors and their interrelations. Institutions, instruments and operations. Sources and uses of funds; debt and equity financing. The structure of interest and its function in market relations. Public debt management and effects on market liquidity.

Processes of monetary policy and diffusion effects of Federal Reserve operations. Comparative references to leading foreign markets.

Prerequisite: 19.306. Offered Spring semester of alternate years.

19.532 Financial Markets in Developing Economies (3)

Formative factors of money and capital markets. The role of the banking system in market formation. Official development banks and private financial institutions and their relations to economic planning. The impact of fiscal and monetary policy on sources and uses of funds. Development programs, inflation and monetary stabilization.

Prerequisite: 19.306. Offered Spring semester of alternate years.

19.731 Monetary Theory (3)

Money and credit as factors influencing income, prices, employment and balance of payments. Behavior patterns in demand for commodities, money and securities, concepts, theories and functions of interest rate and saving and investment processes and income determination. Quantity and velocity in monetary equations and monetary models. Time and liquidity preference and role of financial intermediaries in the monetary process.

Prerequisite: 19.306. Offered Fall semester.

19.732 Theory and Management of Central Banking (3)

Evolution of central banking and comparative institutional analysis. Relations to government and process of monetary policy formulation. Quantitative and qualitative instruments of monetary policy. The role of monetary policy in internal economic policy and international economic relations.

Prerequisite: 19.731. Offered Fall semester.

PUBLIC FINANCE

19.541 Fiscal Theory and Policy (3)

Government financing and fiscal control. Fiscal policies and their welfare implications. Fiscal policy to advance economic stabilization and full employment.

Prerequisites: 19.301 and 19.306.

19.741 Advanced Fiscal Theory (3)

Discussion of selected problems of fiscal theory: compensatory finance, fiscal dynamics, debt policy, etc.

Prerequisite: 19.541.

INTERNATIONAL ECONOMICS

19.533 International Finance and Capital Movements (3)

Balance of payments accounts, modern theories concerning interrelations between price level, balance of payments, and capital movements. Foreign exchange markets, foreign investments and capital movements. International financial organizations. The international monetary system and its reform.

Prerequisites: 19.306 and 19.311. Offered Spring semester of alternate years.

19.751 International Economic Theory (3)

Theory of international specialization, world trade and development, commercial policy, international economic relations. Balance of payments.

Prerequisites: 19.300 and 19.301. Offered Fall semester.

19.752 Current International Economic Problems (3)

U.S. balance of payments problems, international economic institutions, history of the international economy since 1914, current international economic problems, i.e. East-West trade, regional groupings, foreign aid.

Prerequisite: 19.311 or 19.751. Offered Spring semester.

INDUSTRIAL ORGANIZATION

19.571 Industrial Organization and Public Policy (3)

Extent and forms of imperfect competition in the American economy. Objectives, methods, techniques, and rationale of government influence and control. International comparisons.

Prerequisite: 19.300.

LABOR ECONOMICS

19.572 History of the U.S. Labor Movement (3)

Causes and results of organized efforts to regulate the conditions of work and the well-being of workers. Political, economic objectives, social problems surrounding the labor movement.

Prerequisite: 19.304.

19.573 History of the European Labor Movement (3)

Development of the labor movement in Europe. Comparative historical view of trade union ideologies, objectives, structure, methods. International trade union federations.

Prerequisite: 19.304.

19.574 Comparative Labor Relations (3)

Comparative analysis of the status of labor relations in selected foreign industrialized and unindustrialized countries. Includes labor-management relations, labor-government relations, political parties and labor legislation.

Prerequisite: 19.304.

19.575 Labor Statistics (3)

Critical analysis of information on occupational descriptions and classifications, industrial classifications, industrial censuses, employment, payrolls, absenteeism, and unemployment. Wage rates, union scales, vacations, retirement. Prices and real wages. Sources, methods of collection, analysis and presentation.

Prerequisite: 19.304.

19.771 Labor Economics: Theory (3)

Critical evaluation of contemporary wage and employment theory. Analysis of trends affecting the position of labor in modern and traditional societies and their relations to the determination of wages, hours, working conditions. Strategy of collective bargaining. Role of productivity, labor mobility, relative factor prices and industrial organization on wage determination in the firm and in the economy.

Prerequisites: 19.300, 19.301 and 19.304. Offered Fall semester.

19.772 Current Labor Problems (3)

Application of economic theory to the analysis of current labor problems, domestic and foreign. Problems include wage policy and wage differentials, manpower policy, poverty, unemployment and underemployment, discrimination, productivity, industrialization, and union policies.

Prerequisite: 19.771.

SEMINARS

19.780 Seminar in Monetary Economics (3)

Economic and monetary trends and their interrelationship. Federal Reserve policies and government financial operations and their effects on money and capital markets. Review of current economic indicators and monetary and financial statistics; their use for business and monetary analysis. Discussion and supervised research.

Prerequisite: Permission.

- 19.781 Seminar in Economic Theory (3)**
Advanced analysis of problems in the theory of value and distribution, welfare economics, income determination, and economic development. Discussion and supervised research.
Prerequisite: Permission.
- 19.782 Seminar in Research Methods and Applications (3)**
Basic methodological problems in research: workshop in research in selected economic areas. Discussion and supervised research.
Prerequisite: Permission.
- 19.783 Seminar in National Economic Policy (3)**
Economic aspects of leading problems in public policy. Formulation of national economic policy: planning principles and data bases. Discussion and supervised research.
Prerequisite: Permission.
- 19.784 Seminar in International Trade and Finance (3)**
Study of international monetary and trade theories. Analysis of basic factors influencing policies and trends in international trade, foreign investments, flow of aid. Use of balance of payments and international financial accounts for monetary and economic analysis. Central banks' cooperation and monetary reform. International and interregional organizations. Discussion and supervised research.
Prerequisite: Permission. Offered Spring semester.
- 19.785 Seminar on Soviet-Type Economies (3)**
Advanced study of economic growth, planning techniques, and institutional structures of Soviet-type economies. Discussion and supervised research.
Prerequisite: Permission.
- 75.786 Seminar on the Economy of Mainland China (3)**
Advanced study of the problems of the economy of mainland China.
Prerequisite: Permission.
- 19.788 Seminar in Economic Development (3)**
Advanced study of the problems of underdeveloped countries. Discussion and supervised research.
Prerequisite: Permission. Offered Fall semester.
- 19.797 Master's Thesis Seminar (3-6)**
- 19.799 Doctoral Dissertation Seminar (6-12)**

History

Professors:

CARL G. ANTHON (*on leave 1967-68*)
 DAVID J. BRANDENBURG
 (*Chairman*)
 HAROLD E. DAVIS
 DONALD DERBY (*Vice President,*
 Dean of Faculties)
 DOROTHY D. GONDOS
 WILLIAM R. HUTCHISON
 JEAN T. JOUGHIN
 ERNST POSNER (*Emeritus*)
 MILLIDGE WALKER
 TAKEHIKO YOSHIHASHI

Associate Professors:

ROBERT BEISNER
 ROGER H. BROWN
 JOHN J. FINAN
 CHARLES H. HEIMSATH
 ALBERT D. MOTT
 IVAN L. RUDNYTSKY
 ALAN R. TAYLOR

Assistant Professors:

THOMAS V. DIBACCO
 RICHARD R. MERTZ

Adjunct Professors:

FRANK R. EVANS
 KERIM K. KEY

Professorial Lecturers:

ELIZABETH EISENSTEIN
 IRVING I. KRAMER

Lecturers:

CLAUDIA R. UPPER

DEGREE PROGRAMS

Bachelor of Arts

(A major in history is considered either a humanity or a social science)

- University Requirements** Composition and Reading (6 hours)
 Physical Education (4 units—non-credit)
 Humanities are normally satisfied by
 major and related requirements if
 history considered as a humanity.
 Consult department. (12 hours)
 Science and Mathematics (12 hours)
 Social Sciences are normally satisfied by major and related requirements
 if history considered as social science. Consult department. (12 hours)

Language Requirement See page 53

Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Prerequisite Requirements MAJOR COURSES (30 hours)

30 hours in History (including History of the Western World I and II, or waiver, or advanced placement or advanced standing), Historiography (29.482), and Senior Seminar (29.492).

RELATED COURSES (12 hours)

12 hours in a related or minor field at the 300-level or above, according to one of the following options, and with departmental approval: (a) a social science other than history; (b) a humanity other than history (including language or languages beyond the intermediate level); (c) distributed social sciences; (d) distributed humanities; (e) natural science and mathematics.

TOOL COURSES

None

Electives To complete minimum of 120 hours plus non-credit physical education. Students preparing for secondary school teaching should take whatever education courses as are necessary or desired as electives.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May 1967. Students should consult departmental offices for the latest information.)

Master of Arts

Admission See page 38

In general, a better than 2.0 average in the undergraduate major and 1.75 overall (on a 3.0 basis) is required. Other admissions requirements: evidence of at least a substantial beginning in one foreign language; Graduate Record Examination; two letters of recommendation from recent professors. Full-time students must be prepared to finish the degree in one calendar year from time of entry into the program. In general, admission, especially for full-time students, is for fall. Entry into a graduate program in February, while possible in some cases, will make for scheduling and time-table difficulties. A graduate degree in history can not be achieved in summer sessions alone.

Course Requirements Minimum of 30 hours of approved graduate course work distributed as follows:

(1) two research seminars (6 hours) and two colloquia, if available, or suitable substitute (6 hours), all taken for letter-grade credit with an average of B or better

(2) six other courses (18 hours) as directed by the student's advisor.

If in the Department of History, some of these six courses may on recommendation of the advisor, be taken for "S" grade credit. Part-time students shall take a minimum of 12 hours of these eighteen hours for letter-grade credit. Courses taken outside the Department shall be for letter-grade credit.

Comprehensive Examination One eight-hour comprehensive examination in one of the following fields: History of Modern Western Europe (since the 15th century). U.S. History (including colonial), Russian and Eastern European History, History of England and the Empire, Latin American History.

Other Requirements Proficiency examination in one foreign language (French, German, Spanish, Russian—depending on the student's comprehensive field); thesis, or, at discretion of the Department, two substantial research papers written in research seminars.

Time-table Full-time students should complete all requirements for the M. A. in two semesters. A summer's grace is allowed to accommodate unusual circumstances. Part-time students should complete all requirements for the M. A. within three calendar years after entering the program.

Doctor of Philosophy

Admission Full-time Ph. D. students must be prepared to complete all course, language, and comprehensive examination requirements by the end of the second academic year after entry into the Ph. D. program. In general, admission, especially for full-time students, is for fall. Entry into a graduate program in February, while possible in some cases, will make for scheduling and time-table difficulties. A graduate degree in history cannot be achieved in summer-sessions alone.

Course Requirements See page 42

Course work, over and above the 30 hours taken for the M. A., shall include but is not limited to the following: two research seminars and two colloquia, or suitable substitutes, for letter-grade credit (12 hours); six other courses selected by the student and his advisor, taken for "S" credit or for letter-grade credit, according to Departmental advice (18 hours). All or part of the remaining 12 hours may be applied to dissertation work. Courses taken outside of the Department of History shall be for letter-grade credit. Part-time students shall take a minimum of 24 of the 42 hours required (not counting Doctoral Dissertation Seminar) for letter-grade credit.

Comprehensive Examinations Four, including at Departmental discretion, the M.A. examination. The four examination fields are as follows:

- (1) the broad M. A. examination field;
- (2) a specialized field in history outside the geographical area of the broad M. A. field;
- (3) a related field outside history, or a specialized field in history;
- (4) another specialized field—the historical major—in history, probably within the area of the broad M. A. field, and within which field the student will write his dissertation. Comprehensive fields must be chosen from the standard list printed below.

Other Requirements Reading knowledge of French and German; in some cases, one of these may be substituted by another language if germane to the candidate's research interests. Students in U. S. History are required to demonstrate proficiency in one language, either French, German, or Spanish. All language requirements must be fulfilled by the beginning of the Second year of full-time graduate work (end of second year for part-time students).

Dissertation. Oral defense of dissertation if recommended by dissertation committee.

Time-table Full-time students should finish all requirements for the Ph. D. within three calendar years after entering the Ph. D. program, or four years after beginning graduate work. Part-time students should complete requirements within six calendar years after entering the Ph. D. program.

Graduate Comprehensive CORE FIELDS

- Examination Fields**
- 29.001 History of Modern Western Europe
 - 29.002 History of the United States (including colonial)
 - 29.003 History of Latin America
 - 29.005 History of Russia and Eastern Europe

SPECIALIZED FIELDS

- 29.010 History of Germany
- 29.011 History of France
- 29.012 History of England
- 29.013 History of Russia
- 29.014 History of the Middle East and North Africa
- 29.015 History of China
- 29.016 History of Japan
- 29.017 History of South and Southeast Asia
- 29.018 Renaissance and Reformation (to 1648)
- 29.019 The French Revolution and Napoleon
- 29.020 History of Europe 1815-1914
- 29.021 History of Europe Since 1914
- 20.022 The Colonial Period, Revolution and Constitution
- 29.023 The Middle Period of U.S. History (1789-1850)
- 29.024 Civil War and Reconstruction
- 29.025 Recent United States History (since 1877)
- 29.026 The Colonial Origins of Latin America and the Achievement of Independence
- 29.027 Latin America since the mid-19th Century
- 29.028 European Diplomatic History
- 29.029 European Intellectual History
- 29.030 U.S. Intellectual History
- 29.031 U.S. Diplomatic History
- 29.032 Latin American Intellectual History
- 29.033 Latin American Diplomatic History
- 29.057 Archival Administration

The following fields have been eliminated for dissertation purposes. They may still be offered as specialized fields for Ph.D. comprehensive examinations.

History of China
History of Japan

History of South and Southeast Asia
Renaissance and Reformation

UNDERGRADUATE COURSES

29.100 Introduction to the Western Tradition I (3)

The intellectual, religious and cultural history of the West from antiquity to the Renaissance. The origins of Christianity, medieval synthesis and decline of Arabic influence and science, heretical trends in religion. (*Primarily for Students Enrolled in the School of International Service*).

- 29.101 Introduction to the Western Tradition II (3)**
The intellectual, religious and cultural history of the West from the Italian Renaissance and the German Reformation to the present. The transformation of thought, birth of science and technology, the West as the instrument of a world civilization. (*Primarily for Students Enrolled in the School of International Service*).
- 29.120 History of the Western World I (3)**
The major developments of the ancient Near East, the Greek, Roman and early Christian world up to the twelfth century.
- 29.121 History of the Western World II (3)**
From the twelfth century Renaissance to the end of the Age of Louis XIV.
- 29.310 The Ancient World (3)**
Origin and nature of early near-eastern and Greek cultures. Economic, social, and political history of the Roman World.
- 29.311 Medieval Europe (3)**
Formative period of European civilization. Transition of social life and political institutions from the Roman Empire to the age of European discovery and exploration.
- 29.312 History of Modern Europe I (3)**
Nature, causes, social consequences of the Reformation. Catholic Reformation. Evolution of political ideologies and institutions. Expansion of commerce and the growth of empires. French Revolution and the Age of Napoleon.
- 29.313 History of Modern Europe II (3)**
Development of European nationalities from 1815 to the present. The Age of Metternich, rise of liberalism, industrial revolution, and social, cultural, and economic bases of nationalism and imperialism.
- 29.320 History of England I (3)**
Political, economic, social, and cultural life in England to 1689. Origins and development of constitutional government. Beginnings of empire.
- 29.321 History of England II (3)**
England and the British Empire since 1689, Evolution of constitutional government, expansion of empire, the empire system since World War II.
- 29.340 History of the U. S. I (3)**
Survey course giving a comprehensive history of our country from colonial times to the Civil War.
- 29.341 History of the U. S. II (3)**
Survey course covering period from the Civil War to the present.
- 29.443 Social History of the U. S. I (3)**
Social factors in U. S. history from colonial times to the Civil War. Emphasis upon the family, labor, immigration, slavery, religion, the westward movement.
- 29.444 Social History of the U. S. II (3)**
Analysis of American society since the Civil War with special attention to social classes and ethnic groups, urbanization, industrialism, technology, the social gospel, social welfare, and urban developments.
- 29.471 Civilization in the Americas: National Development (3)**
Background of independence. Growth of American nations since 1825. Inter-American relations and the Pan-American movement. The Americas in recent world affairs.

29.482 Historiography (3)

Methods and materials of history and an introduction to the major historians from the Greeks to the present.

29.492 Senior Undergraduate Seminar: U. S. History (3)

Introduction to methods and materials in historical research and writing, with special emphasis on resources in the Washington area.

29.492 Senior Undergraduate Seminar: European and Other Areas (3)

ADVANCED COURSES

(500-level courses are open to graduate students and to advanced undergraduate students.* 600- and 700-level courses are open only to graduate students.)

HISTORIOGRAPHY AND PHILOSOPHY OF HISTORY

29.504 Philosophy of History (3)

Contemporary issues in the philosophy of history with special attention to problems of meaning and structure in the historical process, considered in the light of their historical roots.

Prerequisite: Three hours of philosophy.

29.601 History of European Historical Writing (3)

Development of historiography from the period of the Renaissance. Trends in historical thinking, research and writing. Discussion of representative historical works.

29.603 Historical Writing in the U. S. (3)

Analysis of historical writing in the U. S. from colonial times. Attention to prominent historians and trends in historical thinking and interpretation.

ARCHIVES ADMINISTRATION

29.575 History of Archival Administration (3)

Introduction to the nature of archives and concepts of archival administration. A comparative survey of the history and present practice in the principal countries of the world, with special emphasis on the U.S.

29.576 Archival Administration: Modern Practice (3)

Evaluation, preservation, organization, storage, and use of archival materials. The design, installation, and management of archival systems. The application of automatic information handling systems and techniques

EUROPE

29.507 The Renaissance (3)

A study of the period of transition from the medieval to the modern world. Considerable attention will be given to intellectual and cultural developments, particularly in Italy.

29.508 The Reformation (3)

The Lutheran revolt in Germany and the Reformation in Switzerland, France and England, with considerable emphasis on social and economic changes, and the religious wars up to the Peace of Westphalia.

29.509 The Age of Absolutism 1648-1763 (3)

The institutions and politics of absolute monarchy; the Age of Louis XIV, the Enlightened Despots, and The Age of Reason. Social, economic, and cultural developments will be treated, as well as the main political history of the period.

29.510 French Revolution and Napoleon (3)

European history from 1763 to 1815. Significant aspects of the French

* The department recommends that, as a prerequisite to these courses, advanced undergraduates have completed 6 hours in the general area of the course.

Revolution, the Napoleonic Empire, and the Congress of Vienna.

29.511 History of Europe: 1815-1870 (3)

Reaction, revolution, and reform from Metternich to Bismarck; industrialization and scientific progress; emergence of nationalism, liberalism, and socialism. From romanticism and idealism to positivism and realism.

29.512 History of Europe: 1870 to 1914 (3)

Political, economics, and cultural effects of nationalism, imperialism, and industrialization in Europe. National developments and international alliances. Background of the First World War.

29.513 Europe 1914-1939 (3)

Political, social, and economic developments in Europe from the beginning of the First World War to the outbreak of World War II.

29.514 Europe Since 1939 (3)

The Second World War and its consequences: The Cold War and the emergence of Western Europe. Political, social, economic and cultural currents since World War II.

29.515 Expansion of Europe (3)

Overseas expansion of European countries from the 15th through the 19th centuries. Influence of colonial and imperialistic expansion in shaping recent history.

29.516 Economic History of Modern Europe I (3)

European economy from medieval times through the 18th century. Origins and growth of capitalism. Industrialism, colonialism; public credit and private finance; formation of national economies.

29.517 Economic History of Modern Europe II (3)

Economic aspects of European industrial, national, and colonial development since the 18th century.

29.518 Diplomatic History of Europe I: 1789-1871 (3)

Wars of the French Revolution and Napoleon; the Metternich Era; the revolutions of 1848-49; the unification of Italy and Germany.

29.519 Diplomatic History of Europe II: 1871-1939 (3)

Continuation of 29.518, but may be taken as a separate course. Era of Bismarck; formation of alliances and counter-alliances; diplomacy of colonial imperialism; the First World War and the Versailles settlements; the totalitarian threat to the balance of power.

29.520 English Constitutional History (3)

Development of English political institutions, practices, ideas. Emphasis on evolution of representative traditions rather than on political narrative.

29.521 History of England, 1789-1914 (3)

The French Revolution: The Industrial Revolution and demands for reform; economic, social, and intellectual ideas in the 19th century: Change and disillusionment prior to World War I.

29.522 Britain: Empire and Commonwealth (3)

Elizabethan extension: Mercantilism and competition for Empire. Imperial concepts in the 19th century leading to the "New Imperialism." The development of the commonwealth.

29.524 Modern Revolutions (3)

Theory of revolutionary movements and the form and structure of revolution as exemplified in the Puritan, American, French, and Russian revolutions.

29.525 France, 1815-1885 (3)

Major stresses and strains in post-Revolutionary France. Bourbon Restora-

tion and July Monarchy. Second Republic and Second Empire. Economic and social developments. Collapse of the Second Empire and inauspicious beginnings of the Third Republic. Renewed Monarchist offensive.

29.526 France Since 1885 (3)

Defense and consolidation of the Third Republic. The Dreyfus Revolution, social problems, and the First World War. Grandeur and paralysis between the wars. Vichy, Resistance, and Liberation. The life and death of the Fourth Republic. The Fifth Republic.

29.528 History of Germany: 1500-1870 (3)

A political, social, and cultural history from the Protestant Reformation to the unification of the German states under Bismarck.

29.529 Germany from Bismarck to Adenauer (3)

The Second Reich, the Weimar Republic, and the Third Reich. Emphasis on the rise of National Socialism. The East and West German states since 1945.

29.530 History of Czarist Russia (3)

Expansion of Russia from the Muscovite principality to the empire of the 20th century. Development of institutions and culture.

29.531 Russia Since 1917 (3)

Soviet Union from the October revolution to the Khrushchev era. Emphasis on internal political, socio-economic, and cultural developments.

29.532 History of East Central Europe (3)

East Central Europe (Finland, the Baltic States, Poland, Czechoslovakia, and Hungary) under Russian, Prussian and Austrian domination. The independent States in the Post World War I period.

29.533 History of the Balkans and Turkey (3)

Historical backgrounds. Period of Turkish domination. Rise of nationalism in the Balkans. Great Power diplomacy and the partition of Turkey. Recent developments.

29.582 Intellectual History of Europe I: Through the Enlightenment (3)

Ideas and outlooks that have influenced the development of western history from the 13th century to the eve of the French Revolution.

29.583 Intellectual History of Europe II: From the French Revolution (3)

Cultural and intellectual currents from the end of the 18th century. Rise of the romantic movement; impact of revolutionary ideas, science, and industrial technology.

UNITED STATES

29.540 Colonial Origins of the U. S. (3)

European backgrounds. Founding of the colonies. Political, economic, and social developments within the colonies to 1763.

29.541 Era of the American Revolution (3)

Survey of colonial backgrounds. Origins and developments of the American Revolution. Drafting and establishment of the Constitution of the U. S.

29.542 The New Republic: 1789-1850 (3)

The U. S. from 1789 to 1850. Social and political implications of the Jeffersonian and Jacksonian reform movements of the period. Growth of sectionalism.

29.543 Civil War and Reconstruction (3)

Causes and course of the war; its impact on national life. Problems and effects of reconstruction. Industrialization and urbanization. Social and economic forces.

- 29.544 The Emergence of Modern America 1877-1919 (3)**
From Reconstruction to the end of the First World War.
- 29.545 Recent American History: 1920 to the Present (3)**
Continuation of 29.544.
- 29.546 The Frontier in U. S. History (3)**
Westward expansion from colonial times to the close of the 19th century. Analysis of Turner's frontier hypothesis in the light of recent critical literature.
- 29.548 American Economic History I (3)**
Review of American economic development from the colonial beginnings to the mid-19th century.
- 29.549 American Economic History II (3)**
Review of American economic development during the past one hundred years.
- 29.550 History of Industry in the U. S. (3)**
American industrial development from the end of the 18th century to the present. Structural and organizational aspects, location trends, technology, and distribution.
- 29.552 History of U. S. Foreign Policy I: 1776-1889 (3)**
Historical treatment and critical analysis of American Foreign Policy from the beginning to the end of the Post Civil War Era.
- 29.553 History of U. S. Foreign Policy II: 1889 to the Present (3)**
Continuation of 29.552 down to the present; the growing role of the U. S. in world affairs. May be taken separately from 29.552.
- 29.554 The South in U. S. History (3)**
Colonial times to the present. Factors making the South a distinctive part of the American nation.
- 29.587 Intellectual History of the U. S. I (3)**
Ideas and attitudes of the American people and their leaders from colonial times to the Civil War. Puritanism, the enlightenment, transcendentalism, democracy, and nationalism.
- 29.588 Intellectual History of the U. S. II (3)**
Dominant patterns of American thought from the Civil War to the present. Impact of Darwinian evolution, industrialism, the vanishing frontier, progressive democracy, imperialism, and war.
- 29.643 U. S. Expansion Abroad (3)**
Political and economic expansion of the U. S. in key areas such as Latin America and the Pacific. Ideological impact of American civilization in all parts of the world.

LATIN AMERICA

- 29.571 History of Latin America to 1860 (3)**
Colonization by Spain, Portugal, and France. Causes and developments of independence movements. Political, social, economic and ideological aspects of national developments.
- 29.572 Latin America Since 1860 (3)**
Economic nationalism, militarism, and reform movements. Cultural and religious developments.
- 29.673 Latin American Social and Political Thought (3)**
Spanish and Portuguese backgrounds. Ideas of the Independence leaders. Mid-century liberalism and romanticism. Positivist thought. Contemporary trends.

ASIA AND AFRICA

- 29.535 History of the Far East in Modern Times (3)**
Historical backgrounds; invasion of western influence; conflict of national interests; economic and cultural systems; Asiatic consciousness and world organization.
- 29.536 History of Africa (3)**
History of the African continent during the modern period. European colonization and competition; internal economic, social, and political developments; emerging African nationalism.
- 29.538 History of China Since the Ming Dynasty (3)**
Political and social institutions; schools of thought; legal and moral concepts; literary, artistic and intellectual developments; elements of stability and change; international contacts to recent times.
- 29.539 History of Japan: 1600 to the Present (3)**
Historical background; period of seclusion; restoration of a centralized monarchy; economic and political developments; establishment of an empire; World War II and postwar period.
- 29.561 History of the Middle East I (3)**
History of the area from the Hegira to the fall of Constantinople.
- 29.562 History of the Middle East II (3)**
History of the area from the fall of Constantinople to the present.
- 29.580 History of India I (3)**
India up to the European conquests. Attention to Hinduism and Islam as religious and social forces, caste and family of traditional India, and village life.
- 29.581 History of India II (3)**
Early European penetration and growth of British India Empire. 19th century social and intellectual developments. Growth of nationalism, to the present day. India's response to the Western impact.

COLLOQUIA

- 29.620 Colloquium in European History 1500-1789 (3)**
- 29.621 Colloquium in European History Since 1789 (3)**
- 29.630 Colloquium in U. S. History (to 1865) (3)**
- 29.631 Colloquium in U. S. History (since 1865) (3)**

SEMINARS

- 29.710 Research Seminar in European History (3)**
- 29.730 Research Seminar in the History of the Far East (3)**
- 29.740 Research Seminar in the History of the U. S. (3)**
- 29.750 Research Seminar in the History of Latin America (3)**
- 29.760 Research Seminar in the History of the Middle East (3)**
- 29.770 Research Seminar in Archives Administration (3)**
- 29.797 Master's Thesis Seminar (3-6)**
- 29.798 Non-Thesis Option Seminar (3-6)**
- 29.799 Doctoral Dissertation Seminar (3-6)**

SUMMER INSTITUTES

- 31.530 Institute of Genealogical Research (3)**
- 31.540 Institute in Archives Administration (3)**

Political Science

The program and undergraduate degree of Bachelor of Arts in Political Science are available through registration in either the College of Arts and Sciences or the School of Government and Public Administration.* In either case the student fulfills the University Requirements and completes approximately the same major course pattern. In addition, the student in the College of Arts and Sciences must meet the foreign language requirement and pass the Graduate Record Examination before the end of the senior year.

All majors in Political Science, whether in the School of Government and Public Administration or the College of Arts and Sciences, will look to the Associate Dean, School of Government and Public Administration, and the faculty advisors who assist him for program counseling.

UNDERGRADUATE DEGREE Bachelor of Arts

University Requirements Composition and Reading (6 hours)
Physical Education (4 units—non-credit)
Humanities (12 hours)
Science and Mathematics (12 hours)
Social Sciences are normally satisfied by major and related requirements.
Consult advisor. (12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Departmental Requirements MAJOR AND RELATED REQUIREMENTS

Foundation Courses: All 15 hours required

53.100 Modern Government (3)

53.150 U. S. Political System I (3)

53.250 U. S. Political System II (3)

33.200 Introduction to World Politics (3)

53.300 Research and Political Science I (3)

* See page 327 S.G.P.A. program and course descriptions.

Fields of Specialization: 18 hours required to be completed by: 6 hours in each of three fields; or, 6 hours in each of two fields and 3 hours in each of two others.

A. Theory of Politics and Government

53.310 Political Theory I (3)

53.410 Political Theory II (3)

B. Foreign and Comparative Government

53.330 Comparative Government I (3)

53.430 Comparative Government II (3)

C. International Relations

33.440 International Law and Organization (3)

33.450 Contemporary International Politics (3)

D. Public Law and Legal System

53.350 U. S. Constitutional Law I (3)

53.450 U. S. Constitutional Law II (3)

E. The Political and Electoral System

53.351 Political Dynamics (3)

53.451 Political Parties and Interest Groups (3)

F. National Policy Processes

53.352 Legislative Process (3)

53.452 National Executive (3)

G. Administrative System

53.353 Administrative Process (3)

53.453 The Bureaucracy (3)

H. The Metropolis

53.354 Government and the Metropolis (3)

53.454 Metropolitan Political Systems (3)

RELATED COURSE REQUIREMENTS:

18 more hours to include the following specific courses and social science courses at the 300 level or above (history and/or economics recommended).

19.100 Introduction to Economics I

19.101 Introduction to Economics II

Psychology

<i>Professors:</i>	JANICE M. PAGE	JOSEPH SAMLER
CHARLES K. TRUEBLOOD (<i>Emeritus</i>)	ANNETTE S. THOMPSON	<i>Professorial Lecturer:</i>
*ELLIS WEITZMAN	<i>Instructor:</i>	S. NORMAN FEINGOLD
<i>Associate Professors:</i>	BARBARA J. ROSE	
FRED H. NOTHMAN (<i>Chairman</i>)	<i>Adjunct Professors:</i>	
<i>Assistant Professors:</i>	IRWIN ALTMAN	
MICHAEL J. GURALNICK	ERNEST S. PRIMOFF	* Deceased

UNDERGRADUATE DEGREE

Bachelor of Arts

- University Requirements** Composition and Reading (6 hours)
 Physical Education (4 units—non-credit)
 Humanities (12 hours)
 Science and Mathematics (12 hours)
 Social Sciences are normally satisfied by major and related requirements.
 Consult department. (12 hours)
- Language Requirement** Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.
- Departmental Honors** Consult this department concerning Departmental Honors.
- Departmental Requirements** MAJOR COURSES (31 hours.) Of the 31 hours, the following courses are required:
 57.200 General Psychology (3)
 57.201 Advanced General Psychology (3)
 57.300 Experimental Psychology (4)
 57.301 Learning and Conditioning (3)
 57.307 Mental Hygiene (3)
 57.403 Historical Introduction to Modern Psychology (3)
 The remaining 12 hours are to be chosen from among the departmental offerings listed below:

57.310 Survey of Applied Fields (3)
 57.400 Psychology of the Child (3)
 57.401 Psychology of the Adolescent (3)
 57.404 Introduction to Social Psychology (3)
 57.405 Psychological Measurements I (3)
 57.503 Psychology of the Cognitive Processes (3)
 57.504 Advanced Social Psychology (3)
 57.512 Motivation (3)
 57.525 Physiological Psychology (3)
 57.526 Industrial Psychology (3)

RELATED COURSES (15 hours):

69.202 Basic Statistics (3) and
 69.301 Psychological Statistics (3) required.

Also, advanced work selected from the following fields, or other fields approved by the major adviser, with not more than six hours in any one:

Anthropology	Philosophy	International Relations
Sociology	Economics	Mathematics
	Education	

Courses must be at the 300-level or above, except for 41.222 and 41.223 Differential and Integral Calculus I and II (8) which will be acceptable.

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts in Counseling Psychology

Course Requirements Minimum of 30 hours of approved graduate work including
 57.600 Experimental Foundations of Clinical Psychology (3)
 57.601 Advanced Experimental Psychology I (3)
 57.606 Psychological Measurements III (3)
 57.620 Principles and Practices of Guidance (3)
 57.670 Techniques of Counseling (3)

Written Comprehensive Examinations Two examinations in Counseling Psychology.

Other Requirements Six hours of 57.691 Practicum Training, or 57.797 Master's Thesis Seminar.

Master of Arts in Psychology

Course Requirements Minimum of 30 hours of approved graduate work, including 57.601 and 57.602 Advanced Experimental Psychology I and II (6), 57.640 History and Systems of Psychology (3), 69.518 Methodology V: Psychological Statistics (3).

Written Comprehensive

Examinations Two examinations in General-Experimental Psychology.

Other Requirements Six hours of 57.698 Directed Research, or 57.797 Master's Thesis Seminar.

Doctor of Philosophy

Course Requirements Minimum of 72 hours of approved graduate work, 12 of which must be in 57.799 Doctoral Dissertation Seminar.

Written Comprehensive Examinations Two qualifying examinations and two comprehensive examinations in General-Experimental Psychology.

Other Requirements Proficiency examination in two research tools (language and statistics). Dissertation and oral defense of dissertation.

UNDERGRADUATE COURSES

57.200 General Psychology (3)

Introduction to the scientific study of behavior of organisms.
Prerequisite to all other offerings of the department.

57.201 Advanced General Psychology (3)

Selected topics and critical issues in the following: the nature of psychological inquiry, sensation and perception, learning, motivation and physiological psychology.

57.300 Experimental Psychology (4)

The experimental study of sensation and perception.
Prerequisites: 69.301 and 57.403.
Open only to junior and senior majors.

57.301 Learning and Conditioning (3)

Basic facts of theories of learning and conditioning.
Prerequisites: 57.300 and 69.301.

57.307 Mental Hygiene (3)

The effects of learning, motivation, and biological characteristics on the reactional biography of the individual in society.

57.310 Survey of Applied Fields in Psychology (3)

Applications of psychology in the mental health clinic, business and advertising, human engineering, education, and law.

57.400 Psychology of the Child (3)

Growth through infancy and childhood, with emphasis on emotional behavior, intelligence, learning, social development.

57.401 Psychology of the Adolescent (3)

Physical, mental, social growth of the adolescent, with special consideration of the psychological bases of adolescent behavior.
Prerequisite: 57.400.

57.403 Historical Introduction to Modern Psychology (3)

Historical background and development of present-day systematic points of view in psychology.
Prerequisites: Open to juniors and seniors.

57.404 Introduction to Social Psychology (3)

Influence of group structure and dynamics on the behavior and development of the individual.

57.405 Psychological Measurements I (3)

Fundamental principles of testing and critical survey of representative tests of achievement, intelligence, interest, aptitude and personality.

Prerequisites: 69.301. Open to juniors and seniors.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600- and 700-level courses are open only to graduate students.)

57.503 Psychology of the Cognitive Processes (3)

The experimental study of the psychological processes, and their inter-relationships, involved in verbal behavior, memory, problem solving and thinking.

Prerequisites: 57.300 and 57.301.

57.504 Advanced Social Psychology (3)

Psychological factors in human social behavior. Social aspects of perception, motivation, thinking, language, attitudes, public opinion, persuasion, and prejudice.

Prerequisite: 12 hours of psychology, including 57.404 or equivalent.

57.512 Motivation (3)

Evaluation of current research and theory.

Prerequisite: Open to advanced undergraduate and graduate students.

57.525 Physiological Psychology (3)

A survey of the anatomical and physiological variables which affect sensation, perception, action, learning and motivation.

Prerequisite: 57.300.

57.526 Industrial Psychology (3)

Serving as an introduction to such technical problems as personnel selection, interviewing, morale, supervision, and management; human relations in industry; and the basic human factors involved in the design and operation of man-machine systems.

Prerequisites: Six hours of psychology and 69.202.

57.600 Experimental Foundations of Clinical Psychology (3)

The study of behavior, characteristics of the individual through methods of clinical measurement, observation, and psychotherapy. A study of research in the area.

Prerequisite: permission of instructor.

57.601 Advanced Experimental Psychology I (3)

Research methods.

Prerequisites: Undergraduate experimental psychology and 69.301.

57.602 Advanced Experimental Psychology II (3)

Basic experimental facts and theories in the area of learning, cognition, and verbal behavior.

Prerequisite: 57.601.

57.605 Psychological Measurements II (3)

Theory of mental tests: assessment and prediction.

Prerequisites: 57.405 or equivalent, and 69.301 or equivalent.

57.606 Psychological Measurements III (3)

An examination of representative individual tests of intelligence and laboratory practice in the administration, scoring, and interpretation of these tests.

Prerequisites: 57.405 or equivalent, and 69.301 or equivalent.

57.610 Psychology of Personality (3)

Background of major personality theories, critical evaluation of personality theories and current research in the field.

- 57.620 Principles and Practices of Guidance (3)**
Principles and methods of counseling. Basic course for teachers and school administrators; beginning course for counselors.
Prerequisite: 57.405 or equivalent and 57.610.
- 57.624 Abnormal Psychology (3)**
A study of behavior pathology in the human organism.
- 57.640 History and Systems of Psychology I (3)**
Philosophical and scientific background of modern psychology and contemporary problems in theory construction.
- 57.641 History and Systems of Psychology II (3)**
Continuation of 57.640.
- 57.660 Vocational Development and Occupational Information (3)**
The meaning of work in society, vocational development as personality theory, evaluation and utilization of occupational and educational information.
- 57.670 Techniques of Counseling (3)**
Techniques of vocational, educational and personal problem counseling.
Prerequisite: Permission of instructor.
- 57.691 Practicum Training (3-6)**
Practice, under qualified supervision, in technical procedures related to testing and counseling.
- 57.698 Directed Research (3-6)**
For M.A. candidates only.
- 57.797 Master's Thesis Seminar (3-6).**
- 57.798 Seminar in Psychology; may be repeated for credit.**
Prerequisite: Permission of instructor.
I. Current Research in Social Psychology (3-6)
II. Psychometric Methods (3-6)
III. Current Research in Learning (3-6)
IV. The Cognitive Processes (3-6)
V. Current Researches in Sensation and Perception (3-6)
VI. Motivation and the Affective Processes (3-6)
- 57.799 Doctoral Dissertation Seminar (3-6)**

Sociology

Professors:

FRANK LORIMER (*Emeritus*)
JOHN C. SCOTT
S. FREDERICK SEYMOUR
AUSTIN VAN DER SLICE (*Chairman*)

Associate Professors:

RAYMOND N. MORRIS
ANNABELLE B. MOTZ

Assistant Professors:

TEROY S. GRAHAM

DAVID N. RUTH

Adjunct Professors:

HELEN MARIZ
MORRIS ROSENBERG
IVOR WAYNE

Professorial Lecturers:

VLADIMIR DE SMITT
VICTOR EVJEN
JAMES H. FOX
ISAAC FRANCK

JOHN J. GALVIN

RUTH R. MORRIS
JOHN G. THEBAN

Lecturers:

JAMES A. MCCAFFERTY
MARSHA BENNETT

UNDERGRADUATE DEGREE Bachelor of Arts

- University Requirements** Composition and Reading (6 hours)
Physical Education (4 units non-credit)
Humanities (12 hours)
Natural Science and Mathematics (12 hours)
Social Sciences are normally satisfied by major and related requirements. Consult department. (12 hours)
- Language Requirement** Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the course selected at the University.
- Departmental Honors** Please consult this department concerning Departmental Honors.

Departmental MAJOR COURSES

- Requirements** 65.200 Introduction to Sociology
65.410 Sociological Theory
65.420-421 Introduction to Social Research I and II
65.511 Theory of Social Research
At least two courses in the field of Social Organization: 65.340, 65.345, 65.346, 65.415, 65.445
One course in the area of Population and Ecology: 65.352 or 65.450
One course in Social Psychology: 65.570, 65.591, 65.592, 65.593

One Course in Social Change and Disorganization: 65.361, 65.365, 65.416

RELATED COURSES

Introductory courses (9 hours)

3.201 Introduction to Cultural Anthropology; 57.200, General Psychology; 69.202, Basic Statistics

Courses at 300 level and above (18 hours)

Twelve of these hours in one related field chosen in consultation with department adviser.

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May 1967. Students should consult departmental offices for the latest information.)

Master of Arts

Course Requirements Minimum of 30 hours of approved graduate work, including:

65.510 Concepts of Sociology

65.511 Theory of Social Research

65.610-611 History of Sociological Theory I and II

65.612-613 Social Research Methods I and II

65.797 Master's Thesis Seminar (3-6)

Written Comprehensive Examinations Three, including one in sociological theory, one in methods of social research, and one specialized field in sociology.

Other Requirements At least one course above the introductory level in statistics or a departmental proficiency examination in statistics. Thesis and oral defense of thesis.

Doctor of Philosophy

Course Requirements See page 42

Minimum of 72 hours of approved graduate work, including 65.799 Doctoral Dissertation Seminar.

Written Comprehensive Examinations Four, including one in sociological theory, one in methods of social research, one in social organization, and one selected from ethnic group relations, population, criminology, public opinion and mass communication, or social psychology (sociological).

Other Requirements Proficiency examination in two tools of research (German or French, and statistics). Dissertation and oral defense of dissertation.

Graduate Comprehensive CORE FIELDS

Examination Fields 65.001 Sociological Theory

65.002 Methods of Social Research

65.010 Social Organization (for the Ph.D.)

SPECIALIZED FIELDS

65.010 Social Organization (for the M.A.)

65.011 Ethnic Group Relations

65.012 Population

65.013 Criminology

65.014 Public Opinion and Mass Communication

65.024 Social Psychology: Sociological

UNDERGRADUATE COURSES

65.200 Introduction to Sociology (3)*

Honors Section under Sociology.

Permission to participate from Honors Board.

65.200 Introduction to Sociology (3)

Fundamental characteristics of social relationships. Culture, personality, population and ecology, social institutions and processes, cultural change.

65.221 Marriage and Family Living (3)

Recent changes in the American family, including topics such as mode of dating, mate-selection, engagement, early marital adjustment, communication, money, the working-wife, sex, and in-law problems.

65.340 The Family (3)

Varying forms and functions of family organization in different societies. Evolution of American family patterns. Family relations and personal formation. Contemporary social changes influencing family life.

65.345 American Society (3)

An analysis of contemporary American social institutions. The American social system in historical perspective, value systems, ethnic composition, formal and informal structures.

65.346 Comparative Social Systems (3)

A comparative analysis of contemporary societies, social institutions, value systems, formal and informal organization, integration and cohesive relationships with other societies.

65.352 Human Ecology (3)

Relation of environment to distribution of population and to social structure and culture.

65.361 Social Disorganization (3)

Analysis of social problems created by technical and cultural change. Social background of personal maladjustment.

65.365 Introduction to Social Work (3)

Development of social welfare philosophy and practices. The areas of social work, group work, and community organization for public welfare. Community resources. Visits to selected agencies.

65.410 Sociological Theory (3)

Historical background of the theories, concepts, and methods of sociology. Emergence and characteristics of the most significant sociological systems.

65.415 Law and the Social Order (3)

Functions of law in society; social origins and development of political authority around human rights. The changing role of law in the modern democratic state.

* 65.200 is a general prerequisite to all 300 and 400 sociology courses.

- 65.416 Introduction to Criminology (3)**
The nature, extent and social cause of delinquency and crime. The criminal law, the police and the administration of justice. The treatment of the offender.
- 65.420 Introduction to Social Research I (3)**
Introduction to the nature, methods, principles, and techniques of scientific social research. Critical review of types of investigations, with accent on field research.
Prerequisite: 69.202.
- 65.421 Introduction to Social Research II (3)**
A continuation of Introduction to Social Research I.
Prerequisite: 65.420.
- 65.445 Contemporary Communities (3)**
Analysis and comparison of the social and political structures and ideologies of contemporary communities of the world, stressing American community types. Approaches to community research.
- 65.450 Population (3)**
Survey of world population trends. Introduction to methods of analysis. Determinants and consequences of variations in fertility, mortality, and migration.

ADVANCED COURSES

(500-level courses are open to (1) graduate students, (2) undergraduate students with 12 hours of sociology, and (3) other undergraduates with permission of instructor; 600- and 700-level courses are open only to graduate students.)

Prerequisites may be required for some courses.

SOCIOLOGICAL THEORY

- 65.510 Concepts of Sociology (3)**
Systematic survey, critical analysis of sociological concepts. Emphasis on theoretical systems.
- 65.610 History of Sociological Theory I (3)**
Comparative study of major schools of sociological theory in France, Great Britain, the United States.
Prerequisite: permission of the instructor.
- 65.611 History of Sociological Theory II (3)**
Comparative study of major schools of sociological theory in Germany, Austria, Italy.
Prerequisite: permission of the instructor.
- 65.711 Seminar in Sociological Theory (3)**
Intensive study of selected area or school of sociological thought. Emphasis on research in source materials.
Prerequisite: permission of the instructor.

SOCIAL RESEARCH

- 65.511 Theory of Social Research (3)**
Critical analysis of the logical and methodological problems of social investigation. The theoretical orientation of logically distinct approaches to sociological research.

- 65.512 Quantitative Methods in Sociology (3)**
Elements of matrix algebra and their application to Sociology and Social Statistics. Latent structure analysis in Sociology.
Prerequisites: 41.110, 69.202.
- 65.612 Social Research Methods I (3)**
Research procedures in sociology with emphasis on survey design, collection of quantitative data.
Prerequisites: 69.202.
- 65.613 Social Research Methods II (3)**
Research procedures in sociology with emphasis on analysis of quantitative data.
Prerequisite: 65.612.
- 65.615 Attitude Measurement and Research (3)**
Examination of various attempts to measure attitudes and opinions. Emphasis on the evaluation of alternate research methodologies.
Prerequisite: 65.612.
- 65.691 In-Service Training Project (3-6)**
Research project for qualified students working in government or private organization in areas related to their degree program. Project under supervision of faculty and organization concerned.
Prerequisite: Permission of Department Chairman.
- 65.712 Seminar in Social Research (3)**
Investigation of recently developed techniques in various areas of social science and their application to Sociology. May be repeated for credit.
Prerequisite: permission of the instructor.

SOCIAL ORGANIZATION

- 65.540 Social Organization (3)**
The social structure emphasizing the nature, functioning, integration of social institutions; types of organizations; family, clique, voluntary association, work, bureaucracy, community; social differentiation and stratification.
- 65.542 Sociology of Political Action (3)**
Critical evaluation of recent theories of political sociology. Motivation in political behavior. Application of concepts of group participation from functional sociology and psychology.
Prerequisite: 6 hours of government.
- 65.543 Sociology of Work (3)**
A sociological analysis of occupations and the working place. Labor force demography, concepts and basic methodological approaches, relation to the broader areas of social organization.
- 65.547 Social Stratification (3)**
Class, status and power relations in society. Caste, estate, social class, social mobility. Theories and empirical research findings of current importance.
- 65.548 Race and Culture Contact (3)**
Analysis of problems and processes deriving from contacts of peoples different as to race and/or culture. Prejudice, discrimination, conflict, accommodation, acculturation, amalgamation, assimilation.
- 65.549 Sociology of Science (3)**
Science as a major institution in modern society; historical development, social organization, inter-relationship; social, cultural determinants of scientific activities; contributions from sociology of knowledge, invention, technology.

- 65.562 Sociology of Health (3)**
Health problems in their social and economic aspects. Sociological methodologies and findings in the area of health and medical care.
- 65.567 Urban Redevelopment (3)**
Theory and practice of urban redevelopment. Causal factors of city blight and slums; efforts of public, private agencies. Planning, financial, social legislative aspects of urban redevelopment.
- 65.580 Sociology of Religion (3)**
Concepts, methods and techniques in the sociological analysis of religion. Historical, comparative and functional approaches to religion. Emphasis on European and American Christianity.
- 65.714 Seminar in Social Organization (3)**
Consideration of theoretical and methodological problems in the field and preparation of related research reports. May be repeated for credit.
Prerequisite: Permission of the instructor.

POPULATION AND ECOLOGY

- 65.550 The City (3)**
Patterns and process of urban society. The ecological and social organization of the modern city. Urban problems and trends. Emphasis on methods of research in the field.
Prerequisites: 65.352, 69.202.
- 65.551 Analysis of Population Trends (3)**
Measurement and analysis in demography with substantive treatment of population trends. Stable population theory; factors affecting fertility and mortality; population projection, population distribution.
Prerequisites: 69.202, 65.450.
- 65.554 Morbidity and Mortality Analysis (3)**
Various concepts of a population; increment and decrement functions, measurement of morbidity, life table functions, survivorship function as research tool, biological aspects of life table.
Prerequisite: 65.551.
- 65.715 Seminar in Population Studies (3)**
Investigations of selected problems, with related discussion of theory and methodology.
Prerequisite: Permission of the instructor.

SOCIAL PSYCHOLOGY

- 65.570 Social Psychology of Intergroup Tensions (3)**
The social-psychological nature of intergroup prejudice, and its relations to other aspects of personality and social behavior. Recent research on the determinants of intergroup attitudes. Techniques for the reduction of intergroup tension.
- 65.591 Person and Society (3)**
Ways in which the individual becomes a person with tendencies to play various roles in different situations. Social control through interpersonal relations and self-conception.
- 65.592 Social Aspects of Mass Communication (3)**
Communication of ideas in modern society. Special attention to current empirical research on mass media in relation to sociological theory.
- 65.593 Collective Behavior (3)**
Analysis of crowd, mass, public behavior. Relationship to social movements of modern times. Role of leadership in various types of collective behavior. Factors, processes in emergence of social order.

- 65.716 Seminar in Social Psychology (3)**
Consideration of sociological aspects of recent theoretical and methodological advances in the field and preparation of related research reports. May be repeated for credit.
Prerequisite: Permission of the instructor.

SOCIAL CHANGE AND DISORGANIZATION

- 65.561 Public Welfare: Principles and Problems (3)**
Principles underlying public welfare programs and major problems in the field. Organizational structure, methods of operation of federal, state, local agencies administering programs.
- 65.563 Causes of Crime (3)**
Nature, causal factors in delinquent behavior. Natural history of delinquent careers. Programs and policies for controlling problems of delinquency and crime in urban areas.
- 65.566 Aging in Modern Life (3)**
Social, economic, health problems related to the aging process. Changing social roles, attitudes. Provisions for the economic, health, psychological, social needs of the older person.
- 65.568 Treatment of the Offender I (3)**
A critical examination of the theory, practices and problems in the fields of probation and parole of adult offenders.
Prerequisite: 65.563.
- 65.569 Treatment of the Offender II (3)**
A critical examination of the theory, practices and problems in the institutional treatment of adult offenders.
Prerequisite: 65.563.
- 65.713 Seminar in Family and Marriage Relations (3)**
Intensive study of selected problems in the area of family and marriage relations. Student reports and critical appraisals by the seminar.
Prerequisite: Permission of the instructor.
- 65.717 Seminar in Social Change and Disorganization (3)**
Consideration of recent developments in the methodological and theoretical approaches to selected problems in the area of social change and disorganization, and preparation of related research reports. May be repeated for credit.
Prerequisite: Permission of the instructor.
- 65.797 Master's Thesis Seminar (3-6)**
- 65.799 Doctoral Dissertation Seminar (3-6)**

DIVISION OF FINE AND COMMUNICATIVE ARTS

Art

Professors:

SARAH BAKER (*Emeritus*)

BEN L. SUMMERFORD

ROBERT F. GATES

ANDREW S. KECK

Associate Professors:

LOTHAR BRABANSKI

IRENE ENO

HELENE HERZBRUN (*Chairman*)

Assistant Professors:

ROBERT D'ARISTA

MARY GARRARD

WILLIAM OLDAKER

LUCIANO PENAY LILLO

THEODORE TURAK

Instructor:

RUTH MEIXNER

MARJORIE HIRANO

Adjunct Professors:

WILLIAM CALFEE

LUCILLE FIREY

STEPHEN KRAFT

HUBERT LECKIE

ROBERT B. SHAFFER

Professorial Lecturers:

DOROTHY DAY

ROBERT LAUTMAN

DIANE RUSSELL

CLAIRE SHERMAN

PRENTISS TAYLOR

UNDERGRADUATE DEGREE

Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities are normally satisfied by major and related requirements.	(12 hours)
	Consult department.	
	Science and Mathematics	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Departmental Requirements MAJOR COURSES (30-36 hours)

Students majoring in Art complete one of the following four programs of study (these are minimal requirements):

Fine Arts—36 hours of studio courses (painting, drawing, sculpture and printmaking) with at least 6 hours in three of these four studio fields.

Art Education—24 hours of studio courses with at least 3 hours in each of the four studio fields and 6 hours in 5.370-5.371, Methods of Teaching Art.

Design—24 hours of design courses and 12 hours of studio courses including 5.360, Drawing (for Design Students).

Interior Design—18 hours of Interior Design, 6 hours in 5.350-5.351, Design Fundamentals, and 12 hours in studio courses, including 5.360, Drawing (for Design Students).

Students majoring in Art History complete 30 hours of Art History including 7.100-7.101, Survey of Art I and II.

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May 1967. Students should consult departmental offices for the latest information.)

Master of Arts

Course Requirements Minimum of 30 hours of approved graduate work, including 5.797 Master's Thesis Seminar (3-6).

Of the remaining 24-27 hours, 12-15 hours should be selected from 5.520 and 5.521 Techniques of Etching I and II, 5.533 Materials and Techniques of Painting, 5.560 and 5.561 Drawing I and II, 5.792 Art Laboratory—Painting, 5.793 Art Laboratory—Sculpture; and 12 hours should be selected from art history, humanities or social sciences.

Written Comprehensive Examinations Two, including one in theory and techniques of painting or sculpture, and one in a specialized field of art history.

Thesis Execution of an original work or works of art defended by written critical analysis of problem undertaken.

Graduate Comprehensive CORE FIELDS

Examination Fields 5.001 Theory and Techniques of Painting

5.002 Theory and Techniques of Sculpture

SPECIALIZED FIELDS

5.009 Medieval Art

5.010 Renaissance Art

5.011 Modern Art

5.014 Criticism of Painting

5.015 Sculpture

5.016 Painting

5.017 Art Education

5.018 Painting: Renaissance & Baroque

5.019 Painting: Rococo to Modern

UNDERGRADUATE COURSES

STUDIO

- 5.130 Oil Painting I (1)**
Basic problems of figure and still life painting. Emphasis on color and design. Primarily for amateurs and students other than art majors. May be repeated for credit.
- 5.131 Oil Painting II (1)**
Continuation of 5.130.
- 5.160 Sketch Class I (1)**
Life drawing with emphasis on rapid sketch. May be repeated for credit.
- 5.161 Sketch Class II (1)**
Continuation of 5.160.
- 5.320 Creative Painting I (2-3)**
Fundamentals of painting. Comprehensive consideration of color, composition and drawing from still life and figure and in individually assigned projects. May be repeated for credit. Student registers in elementary section in first year, intermediate section second year and advanced section in third and fourth years.
- 5.321 Creative Painting II (2-3)**
Continuation of 5.320.
- 5.340 Sculpture I (2-3)**
Problems and principles of sculpture. Acquaintanceship with tools, techniques, materials for plastic expression. May be repeated for credit.
- 5.341 Sculpture II (2-3)**
Continuation of 5.340.
- 5.360 Drawing I (3)**
Structural drawing from the human figure and head. Anatomy, movement, expression. Course covers range of techniques and mediums. May be repeated for credit.
- 5.361 Drawing II (3)**
Continuation of 5.360.
- 5.364 Printmaking I (3)**
The exploration of wood cut, relief and various other print techniques as a media of creative expression.
Prerequisite: 6 hours of drawing.
- 5.365 Printmaking II (3)**
Exploration of serigraphy, etching and other print techniques. Emphasis on experimentation with combined and new media.
Prerequisite: 5.364 or 6 credit hours of drawing.

DESIGN

- 5.350 Design Fundamentals I (3)**
Theory and techniques of design, applicable to all problems of visual presentation: layout, display, graphics, etc.
Prerequisite: 5.360 (for design students) or concurrent registration.
- 5.351 Design Fundamentals II (3)**
Continuation of 5.350.
Prerequisite: 5.350.

- 5.352 Lettering and Typography I (3)**
Theory and analysis of letter forms including practice and execution. Study of type faces, their arrangement and setting.
- 5.353 Lettering and Typography II (3)**
Continuation of 5.352; particular application to advertising design.
Prerequisite: 5.352.
- 5.354 Creative Photography I (3)**
Introduction to the problems of the camera and its use as a creative medium in the field of two-dimensional design. Laboratory and lecture.
- 5.355 Creative Photography II (3)**
Continuation of 5.354.
Prerequisite: 5.354.
- 5.356 Advanced Design I (3)**
Experimentation and practice in design problems relating to visual communication; emphasis on techniques and solutions of professional problems.
Prerequisite: 5.351 or equivalent.
- 5.357 Advanced Design II (3)**
Continuation of 5.356.
Prerequisite: 5.356 or permission of instructor.
- 5.368 Interior Design I (3)**
Basic principles, materials and methods used in the vertical and horizontal designing of simple interior spaces. Lecture and laboratory.
Prerequisite: 5.360 (for design students) or permission.
- 5.369 Interior Design II (3)**
Correlation of materials and furnishings with the functional requirements of planning multiple interior spaces. Lecture and laboratory.
Prerequisite: 5.361 (for design students) and 5.368.
- 5.378 Problems of Traditional Interiors (3)**
Intensive investigation of aesthetic solutions to the designing of period interiors. Lectures and laboratory.
Prerequisite: 7.102 and 7.103.
- 5.379 Problems in Modern Interiors (3)**
Intensive investigation of aesthetic solutions to the designing of modern interiors. Lectures and laboratory.
Prerequisite: 7.102 and 7.103.
- 5.388 Techniques of Interior Design (3)**
Theory and practice of interior design, including the design, specification and fabrication of furnishings and equipment for interiors. Lectures and projects.
Prerequisite: 5.369.
- 5.389 Senior Problems in Interior Design (3)**
Thorough analysis, organization and solution of complex design problems in definitive and professional presentations. Laboratory.
Prerequisites: 12 hours of interior design including 5.369 and 5.388.

ART EDUCATION

- 5.370 Methods of Teaching Art I (3)**
Crafts used in teaching, e.g., simple pottery, silk screen, linoleum block, fabric design, etc., as well as theory of teaching art on secondary school level.
Prerequisite: 12 credit hours of studio classes or permission of instructor.
- 5.371 Methods of Teaching II (3)**
Continuation of 5.370.
Prerequisite: 5.370.

5.380 Teaching Art in Elementary Schools (3)

Methods and techniques of teaching art as part of regular elementary school instruction.

ART HISTORY

7.100 Survey of Art I: Ancient and Medieval (3)

Illustrated historical introduction to architecture, sculpture and painting with art presented as an objectification and record of man's major beliefs and ideas. Field trips.

7.101 Survey of Art II: Renaissance and Modern (3)

Illustrated historical introduction to architecture, sculpture and painting in Western world between 1500 and 1950. Field trips.

7.102 Survey of the Decorative Arts I (3) (formerly 5.358, Interior Design I)

Illustrated historical introduction to the Decorative Arts, furniture, fabrics, ceramics, interior architecture from the Greeks through the 17th century.

7.103 Survey of the Decorative Arts II (3) (formerly 5.358, Interior Design I)

Illustrated historical introduction to the Decorative Arts, furniture, fabrics, ceramics, interior architecture from the 18th through the 20th centuries.

7.104 Introduction to Visual Arts (3)

Develops visual perception and presents philosophical and theoretical background necessary for an informed and sensitive appreciation of painting, sculpture, architecture and the decorative arts. Lectures and visual material. *Does not satisfy art or art history major requirements.*

7.300 Ancient Art (3)

Ancient Mediterranean civilizations studied through the language of the visual arts with emphasis on the cultural achievements of classical Greece.

7.304 Renaissance Architecture (3)

Renaissance, Mannerist and Baroque architecture in Italy and spread of styles to North Europe from 1750.

7.305 Modern Architecture (3)

Development of architecture in Europe and the United States from 1700 to present.

7.308 Oriental Art I: Chinese (3)

Main currents and monuments of Chinese art from earliest (c. 2500 B.C.) to 1800 A.D.

7.309 Oriental Art II: Japanese and Southeast Asia (3)

Arts and culture of the Far East with emphasis on Japan, India, and other Asian civilizations (excluding China).

7.310 Art in the United States I (3)

Survey of painting, sculpture and architecture from earliest Colonial days to 1870, viewed against their European backgrounds.

7.311 Art in the United States II (3)

Evaluation of major art forms (painting, sculpture, architecture) in United States from Civil War to present, emphasizing growth of independent style.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600- and 700-level courses are open only to graduate students.)

STUDIO

5.520 Techniques of Etching I (3)

A course in engraving, etching and aquatint, designed to give the advanced student a thorough knowledge of traditional and modern methods in intaglio printing.

Prerequisite: 5.364, 5.365.

5.521 Techniques of Etching II (3)

Continuation of 5.520.

Prerequisite: 5.520.

5.533 Materials and Techniques of Painting (3)

Technical investigation of painting methods from Renaissance to present. Preparation of grounds, media, under-painting, glazing, emulsions for tempera, etc.

Prerequisite: 12 credit hours of painting.

5.560 Drawing I (3)

Experiments in the creative emotional quality of drawing. Development of a personal creative expression.

Prerequisite: 12 credit hours of undergraduate drawing.

5.561 Drawing II (3)

Continuation of 5.560.

Prerequisite: 5.560 or 12 credit hours of undergraduate drawing.

5.792 Art Laboratory—Painting (3-6)

Intensive investigation of ideas and techniques in painting. Emphasis on experimentation, leading to development of individual style.

Prerequisite: 24 credit hours of painting or graduate standing.

5.793 Art Laboratory—Sculpture (3-6)

Intensive investigation of sculpture with emphasis on experimentation leading to development of individual style.

Prerequisite: 24 credit hours of sculpture or graduate standing.

5.797 Master's Thesis Seminar (3-6).

ART HISTORY

7.500 Renaissance Painting (3)

Painting in Italy from the 14th through the 16th centuries, beginning with the late Gothic tradition in Florence and Siena, and dealing with the Early and High Renaissance in Florence, Rome and Venice, Mannerism, and the beginnings of the Baroque. Emphasis on Raphael, Leonardo da Vinci, Michelangelo, and Titian.

Prerequisite: Six hours of art history including 7.101 or equivalent.

7.501 Baroque Painting (3)

17th century painting in Italy, Spain, France, the Netherlands, and England. Emphasis on Caravaggio, Rubens, Rembrandt, Vermeer, Poussin, and Velasquez.

Prerequisite: Six hours of art history including 7.101 or equivalent.

7.502 Mediterranean Medieval Art (3)

Early Christian in Italy; Byzantine in the Near East; Romanesque and Gothic in Italy (Duccio, Giotto).

Prerequisite: 6 credit hours of undergraduate art history including 7.100 or equivalent.

7.503 North European Medieval Art (3)

Art from the early Christian period through Romanesque and Gothic to 1400 (manuscript illuminations and French cathedrals: sculpture, stained glass).

Prerequisite: 6 credit hours of undergraduate art history including 7.100 or equivalent.

7.506 Renaissance Sculpture (3)

Italian sculpture from 1400 to 1700 with stress on achievements of Donatello, Michelangelo, Bernini.

Prerequisite: 6 hours of art history, including 7.101, or permission of instructor.

7.507 Modern Sculpture (3)

Changes in sculpture from 1700 to the present with stress on innovations of Rodin, Brancusi, Moore and the American abstractionists.

Prerequisite: 6 hours of art history including 7.101 or permission of instructor.

7.508 Rococo Through Impressionism (3)

Painting in the 18th and 19th centuries in Europe and America, covering the styles of Rococo, Neo-Classicism, Romanticism, Realism, and Impressionism, with emphasis on such artists as Watteau, David, Delacroix, Goya, and Monet.

Prerequisite: Six hours of art history including 7.101 or equivalent.

7.509 Modern Painting (3)

Painting of the 20th century in Europe and America, from Post-Impressionism through contemporary painters, dealing with styles such as Cubism, Fauvism, Surrealism, and Abstract Expressionism, and concentrating upon major artists such as Cezanne, Van Gogh, Gauguin, Picasso, and Matisse.

Prerequisite: Six hours of art history including 7.101 or equivalent.

7.510 Northern Renaissance Painting (3)

Painting in France, Germany and the Netherlands from the late 14th through the 16th centuries. Emphasis upon major artists such as Jan van Eyck, Durer, Holbein, Bruegel.

Prerequisite: Six hours of art history including 7.101 or equivalent.

7.700 Criticism of Painting I (3)

Intensive artistic analysis of selected masterpieces from cave paintings to the Italian Renaissance. History of criticism through Renaissance.

Prerequisite: Graduate degree student or permission of instructor.

7.701 Criticism of Painting II (3)

Intensive artistic analysis of selected masterpieces from Italian Renaissance to present day. History of criticism from Baroque to 20th century.

Prerequisite: Graduate degree student or permission of instructor.

Journalism, Public Relations and Broadcasting

Professors:

H. D. CRAWFORD
DONALD M. WILLIAMS

Associate Professors:

HARRY LEE
ROGER PENN

Assistant Professors:

ROBERT O. BLANCHARD
(Chairman)
DONALD T. MOORE
JACK C. SEIGLE

Adjunct Professors:

LAWRENCE BECKERMAN

STANLEY FIELD

JOHN KUIPER

LAWRENCE LAURENT

BERNARD POSNER

Professorial Lecturers:

GENE BECHTEL

RAYMOND G. DICK

BENNY L. KASS

HAROLD NIVEN

JERROLD SANDLER

JIMMIE J. SILMAN, JR.

IRVING A. SPALDING, JR.

H. SETH WILSON

Lecturers:

NICHOLAS DANILOFF

THOMAS GRUBISICH

MICHAEL C. HARRIS

MERRILL T. MC CORD

GORDON ROTH

ELIZABETH L. YOUNG

UNDERGRADUATE DEGREE Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Departmental JOURNALISM

Requirements Departmental courses (24 hours)
Departmental laboratory or internship (3 hours)
Related courses (12 hours)

Minor in one area of the social sciences, humanities, government, or international relations 300 level or above (12 hours)

BROADCASTING

Departmental courses (24 hours)
Departmental laboratory or internship (3 hours)
Related courses (12 hours)

Minor in one area of the social sciences, humanities, government, or international relations 300 level or above (12 hours)

PUBLIC RELATIONS

Departmental courses (24 hours)

Departmental laboratory or internship (3 hours)

Related courses (12 hours)

Minor in one area of the social sciences, government, or international relations 300 level or above (12 hours)

Electives To complete minimum of 120 hours plus non-credit physical education.
Note: Typing ability is required of all majors.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts in Journalism

Course Requirements Minimum of 30 hours of approved graduate work, of which at least 9 hours must be in advanced journalism courses and 9 hours must be in communication theory courses.

Written Comprehensive Examinations Two, including one in communication theory, 17.001, and one in advanced journalism, 17.004.

Other Requirements Thesis demonstrating ability to initiate and conduct original research in journalism and to write effectively.

Master of Arts in Public Relations

Course Requirements Minimum of 30 hours of approved graduate work, of which 9 hours must be in advanced public relations courses and 9 hours must be in communication theory courses.

Written Comprehensive Examinations Two, including one in communication theory, 17.001, and one in public relations, 17.005.

Other Requirements Thesis demonstrating ability to initiate and conduct original research in public relations and to write effectively.

Master of Arts in Broadcasting

Course Requirements Minimum of 30 hours of approved graduate work, of which 9 hours must be in advanced broadcasting and 9 hours in communication theory courses.

Written Comprehensive Examinations Two, including one in communication theory, 17.001, and one in broadcasting, 17.003.

Other Requirements Thesis demonstrating ability to initiate and conduct original research in broadcasting or film and to write effectively.

UNDERGRADUATE COURSES

- 17.100 Survey of Mass Communication I (3)**
Historical, social, legal, and economic aspects of the mass media; current practices and responsibilities; communication aspects of public relations and advertising.
Required of all department majors.
- 17.101 Techniques of Mass Communication (3)**
Study of the basic techniques of mass communication. Practice in various forms of writing for the mass media. (Special section provided for broadcasting majors.) Required of all department majors.
Prerequisite: 17.100.
- 17.320 News Reporting (3)**
Fundamentals of news gathering, news writing, and news judgment for all the media; study of news sources, research and interview techniques; supervised writing. Typing ability necessary.
Prerequisite: 17.101.
- 17.322 Editing (3)**
Basic instruction and practice in the editing process for all the media, including copy editing and editorial judgment.
Prerequisite: 17.101.
- 17.325 Feature Writing (3)**
Study of various types of feature articles for newspapers, syndicates, magazines, and specialized publications; practice in research, interviewing, writing, revision and the marketing of articles.
Prerequisite: 17.101.
- 17.330 Newspaper Laboratory (1)**
For students working on the student newspaper, *The Eagle*. May be repeated twice.
Prerequisite: permission of Department.
- 17.331 Magazine Laboratory (1)**
For students working on the student magazine, *American*. May be repeated twice.
Prerequisite: permission of Department.
- 17.332 Yearbook Laboratory (1)**
For students working on the student yearbook, *The Talon*. May be repeated twice.
Prerequisite: permission of Department.
- 17.333 Broadcasting Laboratory (1)**
For students working in University Radio, Television and Film facilities. May be repeated twice.
Prerequisite: permission of Department.
- 17.342 Magazine Journalism (3)**
Survey of contemporary periodicals, their backgrounds, trends, functions, staff organization, free lance sources, editorial policies and practices.
Prerequisite: 17.100.
- 17.343 Photography (3)**
Study of photographic requirements and professional techniques for newspapers, magazines, syndicates, and specialized publications. Picture planning and taking; selecting and editing photographs for publication.
Prerequisite: 17.101.
- 17.344 Business Journalism (3)**
Survey of policies and practices of newspapers and periodicals devoted to business and industry, including association publications, employee publica-

tions, house organs, and newsletters.

Prerequisite: 17.101.

17.345 Community Journalism (3)

Study and discussion of special problems and practices of community, suburban, and special-interest dailies and weeklies.

Prerequisite: 17.101.

17.346 Scientific and Technical Journalism (3)

Study and practice of the basic techniques of writing and editing scientific and technical material for both the general audience and the specialist.

Prerequisite: department permission.

17.381 Broadcasting Procedures (3)

Study and practice in the adaptation of presentational methods and materials to the requirements of radio and television. Laboratory.

Prerequisite: 17.101, 17.333.

17.382 Writing for Broadcasting (3)

Principles and practice of writing for the broadcast and film media. Preparation of copy for the basic program types.

Prerequisite: 17.101.

17.383 Radio Production and Direction (3)

Study and application of the techniques of radio production and direction, with laboratory.

Prerequisite: 17.381.

17.384 TV Studio Operations (3)

Principles and practice in the operation of television studio equipment, with laboratory.

Prerequisite: 17.381.

17.385 TV-Radio News (3)

Study and practice in the special application of news writing and editing to the broadcasting media, including use of wire copy and tape recorders in producing newscasts.

Prerequisites: 17.320 and 17.381.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 700-level courses are open only to graduate students.)

COMMUNICATION THEORY

17.500 Communication History (3)

Evolution and development of newspapers, magazines, radio, television, and motion pictures as communication media. Influence of historic backgrounds on contemporary ethics and practices.

Prerequisite: 17.101.

17.501 Communication Law (3)

Current legal problems and theory of controls in journalism, visual communication, television and radio. Analysis of libel suits, copyrights, infringements. No previous knowledge of law required.

Prerequisite: permission of Department.

17.503 Mass Media in Society (3)

The role of newspapers, magazines, broadcasts, motion pictures, and other mass media in society and their impact on world affairs.

Prerequisite: 17.100.

- 17.507 Freedom of Information (3)**
Investigation of access and barriers to information at local, state, national and international levels. Information access rights and responsibilities of communication media. Individual research projects.
Prerequisite: 17.101.
- 17.591 Internship (3)**
Supervised study of communication practices at selected organizations. Sponsoring agencies provide a scholarship in the amount of the student's tuition for the internship. Open to students in the upper half of their junior or senior class and/or graduate students, by application one month prior to registration.
- 17.710 Seminar in Public Affairs (3)**
Intensive study of public affairs and current events in the news, with special attention to the journalistic problems of news coverage in Washington; guest lecturers, discussion, and research papers.
Prerequisite: department permission.
- 17.760 Introduction to Graduate Research (3)**
Development, analysis, and use of research methods for communication media, including audience, communicator, and content measurement techniques.
Prerequisite: Permission of Department. (Required of all graduate students.)
- 17.782 Broadcasting in the Public Interest (3)**
Analysis of the responsibilities of the broadcaster in terms of "public interest, convenience, and necessity"; comparison of U. S. and foreign programming.
Prerequisite: department permission.

Journalism

- 17.520 Advanced Editing (3)**
Advanced training to develop editorial judgment and skills in processing material for publication; study of problems and practices in making assignments, handling departments, and dealing with copy.
Prerequisite: 17.322.
- 17.521 Editorial Writing (3)**
Editorial page policies and practices; supervised writing of various types of editorials on current subjects; analysis of editorial columns and interpretive reviews.
Prerequisites: 17.320 and 17.322.
- 17.523 Advanced Photography (3)**
Advanced study of photography, especially for publication purposes, including use of cameras, darkrooms, printing, and picture editing.
Prerequisite: 17.343.
- 17.524 Advanced News Reporting (3)**
Advanced training in writing news for publication, with emphasis on specialized areas of coverage; students cover assignments in selected fields for one full day a week.
Prerequisite: 17.320, and special departmental permission.
- 17.526 Advanced Feature Writing (3)**
Principles and methods of writing feature stories for publication. Individual attention to problems. Students submit articles for publication.
Prerequisite: 17.325.
- 17.527 Advanced Scientific and Technical Journalism (3)**
Advanced study and practice of writing and editing scientific and technical manuals, reports, proposals, articles, and films.
Prerequisite: 17.346.

- 17.531 Foreign Press (3)**
History and development of press and broadcasting systems in foreign countries. Comparison with the systems and problems in the United States.
Prerequisite: Permission of Department.
- 17.532 Publication Layout and Design (3)**
Study of layout, typography, design, and printing in the planning and production of newspapers, magazines, books, brochures, and folders.
Prerequisite: permission of Department.
- 17.536 Government News Reporting (3)**
Special problems in covering the White House, Congress, U. S. Departments, Agencies and Courts, utilizing facilities in Washington as a laboratory for intensive study and writing practice for one full day a week.
Prerequisites: 17.320, 17.523, permission of the Department.
- 17.720 Seminar in Journalism (3)**
Specialized and current problems in journalism, with emphasis on individual research projects. Topic of the seminar varies.
Prerequisite: permission of Department.

Public Relations

- 17.540 Principles of Public Relations (3)**
Historical development of public relations; economic and social factors in relations between publics and media in the formation of public opinion. Case studies of current practices.
Prerequisite: 17.101.
- 17.541 Publicity Writing (3)**
Writing for public relations, publicity, and promotional programs; preparation of news releases, articles for magazines and trade journals, broadcasting scripts and promotional booklets.
Prerequisites: 17.320 and 17.540.
- 17.542 Promotional Campaigns (3)**
Case studies of promotional methods of business, government, and social organizations; development of a promotional campaign by each student.
Prerequisite: 17.540.
- 17.543 Public Relations Overseas (3)**
Problems of public relations in international trade and diplomacy; case studies of American business public relations practices in other countries; analysis of U.S.I.A. programs.
Prerequisite: permission of Department.
- 17.544 Public Relations in Government (3)**
Analysis of objectives and problems of governmental agencies in their relations with various publics; case studies of public information programs.
Prerequisite: 17.540.
- 17.545 Public Relations in Business (3)**
Case studies in business and industrial relationships with various publics, such as labor, trade, dealer, customer, stockholder, and community.
Prerequisite: 17.540.
- 17.546 Audio-Visual Communication (3)**
Study of the problems of picturing abstract ideas and information through exhibits, graphics, cinema, television, and other audio-visual arts for advertising, education, and public relations.
Prerequisite: permission of Department.

17.740 Seminar in Public Relations (3)

Special problems in the formulation of policies for long-range public relations programs. Emphasis on individual research projects.

Prerequisite: permission of Department.

Broadcasting

17.528 Advanced TV-Radio News (3)

Advanced training in writing, editing, and producing newscasts for the broadcasting media, with emphasis on the problems of broadcast news analysis and commentary.

Prerequisite: 17.385.

17.558 History of Motion Pictures (3)

The historical development of the motion picture as an art form from its earliest development as a laboratory curiosity until the present day.

17.561 Advanced Writing for Broadcasting (3)

Practice in writing documentary and dramatic programs for radio, television, and films.

Prerequisite: 17.382.

17.581 Teaching With Television and Radio (3)

Theory and practice in the adaptation and utilization of educational materials for the broadcast media.

Prerequisite: Permission of the Department.

17.583 Film Production (3)

A comprehensive introduction to the criticism, analysis, and production techniques of films for motion pictures and television.

17.584 TV Production and Direction I (3)

Theory and application of the basic principles and techniques of television production and direction.

Prerequisite: 17.384.

17.585 TV Production and Direction II (3)

Advanced training in the longer, more complex and more sophisticated television programs.

Prerequisite: 17.584.

17.586 TV Production Laboratory (3)

Intensive creative and experimental work in the writing, designing, or performing aspects of TV production.

Prerequisite: department permission.

17.588 Radio-TV Programming (3)

Study and application of the principles of planning radio and television programs and program schedules.

Prerequisite: 17.381.

17.589 Seminar in Broadcasting (3)

Study in depth of certain areas and problems in broadcasting which are not covered in the regular sequence of courses. Topics will vary from semester to semester. May be repeated for credit.

Prerequisite: permission of Department.

Thesis Seminar

17.797 Master's Thesis Seminar (3-6)

This seminar is for all students starting theses in journalism, public relations or broadcasting.

Music

Professors:

JAMES L. MC LAIN
GORDON H. SMITH
LLOYD ULTAN (*Chairman*)

Associate Professor:

EVELYN SWARTHOUT HAYES

Assistant Professors:

ESTHER W. BALLOU
CHARLES F. CROWDER
THOMAS H. HILL
VITO E. MASON
GEORGE C. SCHUETZE, JR.
ALAN MANDEL

Adjunct Professors:

WERNER LYWEN
CHARLES L. BYRD

Professorial Lecturers:

VERA N. ROSS
MARK THOMAS

Lecturers:

SINA BERLINSKI
STEVEN BREWSTER
DONALD CHARNOCK
JEANNE CHALIFOUX
SIDNEY FORREST
EDNA MAE GEORGE

NEVA GREENWOOD
VIRGINIA HARPHAM
LRVIN KLINKON
JOHN MARLOW
HARRY MC CLURE
SYLVIA MEYER
RICHARD PARNAS
KENNETH PASMANICK
SAMUEL E. RAMSAY
PRESTON ROCKHOLT
ARMAND SARRO
BRAM SMITH
DOROTHY STAHL
ROBERT ZIPP

UNDERGRADUATE DEGREE

Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities are normally satisfied by major and related requirements.	
	Consult department.	(12 hours)
	Science and Mathematics	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Departmental Requirements MAJOR COURSES (58 hours)

Including 43.104 Theory I (4)	43.305 Theory VI (4)
43.105 Theory II (4)	43.306 Conducting I (2)
43.204 Theory III (4)	43.307 Conducting II (2)
43.205 Theory IV (4)	43.311 Orchestration (2)
43.300 History of Music I (3)	43.312 Keyboard Harmony I (2)
43.301 History of Music II (3)	43.313 Keyboard Harmony II (2)
43.304 Theory V (4)	and 10 hours of Applied Music.

RELATED COURSES

All music majors must choose as a part of their major a related specialization from the following: music history and literature; music theory and composition; music education (vocal or instrumental); or performance. A minimum of eight hours of advanced work in the chosen specialized area must be completed. Students in every specialization will be expected to demonstrate a minimal proficiency at the keyboard and pass a Departmental Senior Comprehensive Exam. Performance majors will be expected to present a full senior recital. All other music majors must present one half of a senior recital program.

All students majoring in music are required to participate in a faculty-conducted ensemble related to their performance area, where possible, for a minimum of six semesters.

Electives To complete minimum of 120 hours plus non-credit physical education.

GRADUATE DEGREE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May 1967. Students should consult departmental offices for the latest information.)

Master of Arts

Fields of Specialization Composition; Music History (Musicology); Performance; Music Education (Instrumental, Vocal, or General Music sub-specialties).

Master of Arts in Church Music

Fields of Specialization ORGAN OR VOICE SUB-SPECIALTIES

The Master's Program in Church Music is offered with the cooperation of the College of Church Musicians of the Washington Cathedral. It is a 36 credit hour program which includes courses offered at the Cathedral and in this Department and does not require a thesis.

Admission See page 38

For possible graduate deficiencies, consult undergraduate departmental requirements. Four semesters of Harmony and of Ear Training, and one semester each of 16th-century Counterpoint, 18th-century Counterpoint, and Form and Analysis shall be considered the equivalent of Theory I-VI. Graduate deficiencies may be made up by appropriate course work or by waiver examination; courses no longer offered by the Department (e.g., 16th-century Counterpoint) may be taken as undergraduate reading courses.

Students wishing to specialize in Performance are required to audition, either in person or *via* tape recording, prior to admission to graduate study. The graduate degree is offered in all undergraduate performance areas, with the exception of guitar.

Students wishing to specialize in Music Education are required to have completed before admission to graduate study:

- (1) nine hours in education;
- (2) one semester of teaching experience, or the equivalent in practice teaching (see listing in the Department of Education—21.691)

All students are required to take the departmental Senior Comprehensive Examination in music history and theory either before or during

their first semester of graduate work. The results are intended for counseling purposes only.

Course Requirements Minimum of 30 hours (36 in Church Music) of approved graduate work, including the requirements in one of the following fields of specialization:

COMPOSITION: 43.507; 43.516; 43.797; plus a minimum of nine (9) additional hours in theory and composition courses.

MUSIC HISTORY AND LITERATURE (MUSICOLOGY): 43.510; 43.797 (3-6 hours); plus a minimum of 12 additional hours in Music History (Musicology) courses.

PERFORMANCE: 43.510; 43.550; 43.551; 44.791 and/or 44.792 (totaling 4 hours); 43.797 (3 hours).

CHURCH MUSIC: 43.515; 43.570; 43.670 (6 hours); 43.680; 43.701; 43.791 (2 hours; voice lessons for organ students or vice versa); 43.792 (4 hours); plus either of the following (offered at the College of Church Musicians):

Organ sub-specialty: Service Playing and Improvisation I & II (4 hours); Organ Repertory I & II (2 hours).

Vocal sub-specialty: Choir Training and Administration I & II (2 hours); Choral Repertory I & II (2 hours).

Elective courses (to total 36 hours) may include any other graduate-level courses in the Department of Music; appropriate courses in philosophy and religion from the offerings of the Department of Philosophy and Religion, or from those of the Wesley Theological Seminary (to be selected with the assistance of the Church Music Adviser); the following courses from the offerings of the College of Church Musicians:

Liturgies I, II, III, IV (4-6 hours)

Supervised Service Direction I, II, III, IV (2 hours)

Service Playing III & IV (4-6 hours)

Choir Training and Administration I & II (2 hours)

Choral Repertory I & II (2 hours)

Organ Repertory I & II (2 hours)

Conducting III & IV (with special permission; 2 hours)

MUSIC EDUCATION (*instrumental and vocal*): 21.504 (see Department of Education listing in the University Bulletin); 43.540; 43.760; plus either 43.797 (3-6 hours) or 43.690 (3-6 hours).

MUSIC EDUCATION (*general music*): 43.510; 43.760; either 43.797 (3-6 hours) or 43.690 (3-6 hours); plus nine (9) additional hours in Music History (Musicology) courses and six (6) hours in Theory and Composition courses.

Electives to complete the 30 hours (36 hours in Church Music) may *Not* include (also, see restrictions pertaining to Reading Courses):

(1) more than 6 hours of non-music courses; registration in such courses for credit for the degree must be approved by the chairman of the Department of Music;

(2) more than four (4) hours of applied music (students specializing in performance or in church music may apply no more than 2 hours of applied music, in addition to that already required, toward the degree);

(3) more than 3 hours of 43.555.

Comprehensive Examinations One examination that combines and interrelates music history and theory; and one examination in the student's field of specialization.

Graduate Comprehensive Examination Fields 43.000 General Music History and Theory (required of all students).

43.001 Composition

43.002 Music History (Musicology)

43.003 Church Music (organ)

43.004 Church Music (voice)

43.005 Music Education (instrumental)

43.006 Music Education (vocal)

43.007 Music Education (general music)

43.008 Masters Recital

Other Requirements Proficiency in German, French, or an approved substitute. Statistics, or the equivalent, is required in place of a language proficiency of students specializing in instrumental or vocal Music Education.

Students specializing in Performance are required to present a minimum of four appearances on departmental student recitals, at least one as part of an ensemble performance.

UNDERGRADUATE COURSES

HISTORY AND LITERATURE

43.100 Fundamentals of Music (3)

Development of listening techniques based on an understanding of the functional role of the elements in the organization of music.

43.101 Survey of Musical Styles (3)

Representative compositions and composers from the Middle Ages to the Twentieth Century, compared and evaluated within an historical and cultural context.

Prerequisite: 43.100.

43.102 Orchestral Music (3)

The development of the orchestra and its music from the late Sixteenth Century to the present including consideration of form, style and instrumental color.

Prerequisite: 43.100.

43.103 The Evolution of Jazz (3)

A study of the cultural sources and the growth of divergent stylistic characteristics of Jazz through the past one hundred years.

Prerequisite: 43.100.

43.300 History of Music I (3)

Development of music in Western civilization from the modal structures of the Greeks to the Baroque Era.

Prerequisite: 43.205.

43.301 History of Music II (3)

Development of music in Western civilization from the Baroque Era to the present day.

Prerequisite: 43.300.

THEORY

43.104 Theory I (4)

Comprehensive study of scales, modes, rhythm, instruments, and notational practices from the Middle Ages to the present. Basic general concepts of

rhythm, melody, harmony, counterpoint, and form studied in the context of developing ear and sight reading proficiency.

43.105 Theory II (4)

Line, rhythm, notation, form and vertical relationships as practiced in Medieval Music. Literature and style studied by analysis, composition, sight reading and aural dictation.

Prerequisite: 43.104.

43.204 Theory III (4)

Study of 15th and 16th Century style and theory by analysis, composition, sight reading and aural dictation.

Prerequisite: 43.105.

43.205 Theory IV (4)

Study of Baroque style and theory by analysis, composition, sight reading and aural dictation.

Prerequisite: 43.204.

43.304 Theory V (4)

Music of the Classic and Romantic Periods studied by analysis, composition, sight reading and aural dictation.

Prerequisite: 43.205.

43.305 Theory VI (4)

Study of the diverse styles and theoretical attitudes of the Twentieth Century by analysis, composition, sight reading and aural dictation.

Prerequisite: 43.304.

43.306 Conducting I (2)

Practical study of basic conducting technique; emphasis on choral conducting.

Prerequisite: 43.205.

43.307 Conducting II (2)

Orchestral conducting; score reading and interpretation.

Prerequisite: 43.306.

43.311 Orchestration (2)

Scoring for various chamber ensembles and full orchestra. Analysis of orchestration practice of master composers from classic era to present.

Prerequisite: 43.205.

43.312 Keyboard Harmony I (2)

Keyboard practice of chord progressions in four parts; cadence patterns; simple melodic harmonization; harmonic sequences.

Prerequisite: 43.205.

43.313 Keyboard Harmony II (2)

Continuation of 43.312; modulation and transposition; special projects for individual needs.

Prerequisite: 43.312.

43.315 Composition I (3)

Individually supervised practice in writing short compositions in specified small forms.

Prerequisite: 43.205.

43.316 Composition II (3)

Continuation of 43.315; assignments adapted to individual needs and talents of students.

Prerequisite: 43.315.

MUSIC EDUCATION

43.140 Introduction to Music Education (3)

History of music education, contemporary philosophy and objectives of music education in the elementary and secondary schools; scope and sequence of the

music curriculum appropriate to general, choral and instrumental instruction.
Prerequisite: Sophomore standing.

43.352 Music for Elementary School Teachers (3)

Technical background and methods of presentation for teaching music as a part of regular classroom instruction.

Prerequisite: 43.100.

43.360 Instrumental Music: Methods and Materials (3)

Survey of materials for building repertoire appropriate to various instrumental groupings; principles of pedagogy relating to the percussion family; methods and materials.

Prerequisite: 43.140.

43.361 Vocal Music in the Elementary School: Methods and Materials (3)

Principles, procedures and materials for the general music program in the elementary school.

Prerequisite: 43.140.

43.362 Vocal Music in the Secondary School: Methods and Materials (3)

Principles, procedures and materials for the general and choral music program in secondary schools.

Prerequisite: 43.140.

APPLIED MUSIC CLASS

43.113 Classical Guitar I (1)

Beginning study of classical guitar in preparation for private study.

43.114 Classical Guitar II (1)

Continuation of Classical Guitar I.

43.115 Class Piano (1)

Beginning piano study directed toward satisfaction of the Department's minimal piano requirements.

43.116 Class Piano II (1)

Continuation of basic piano skills begun in Class Piano I, necessary for entrance into Keyboard Harmony, and private piano study.

Prerequisite: 43.115.

43.117 Class Voice I (1)

Beginning voice study directed toward satisfaction of the minimal voice requirements in Music Education.

43.118 Class Voice II (1)

Application of basic principles of correct use of the singing voice to the study of good song literature.

Prerequisite: 43.117.

43.149 Class Instrumental Study: Brass (1)

Performance on brass instruments embodying fundamentals of embouchure formation, fingering, breathing and principles of pedagogy relating to the brass instruments; methods and materials.

Prerequisite: Permission of the instructor.

43.150 Class Instrumental Study: Strings (1)

Performance on stringed instruments embodying fundamentals of position, fingering and bowings; principles of pedagogy relation to the string family; methods and materials.

Prerequisite: Permission of the instructor.

43.151 Class Instrumental Study: Woodwinds (1)

Performance on woodwind instruments embodying fundamentals of embouchure formation, fingering, breathing; principles of pedagogy relation to the family; methods and materials.

Prerequisite: Permission of the instructor.

43.152 University Chorale (1)

Prepares and presents major works of choral literature.

Prerequisite: Audition.

43.153 University Singers (1)

A small, highly select traveling choral ensemble which presents both sacred and secular programs.

Prerequisite: Audition.

43.154 University Orchestra (1)

Prerequisite: Audition.

43.155 Instrumental Ensemble (1)

Symphonic Wind Ensemble and Chamber Ensembles.

Prerequisite: Audition.

APPLIED MUSIC (Private Study)

(All undergraduate courses in Applied Music may be repeated for credit. All fees listed are in addition to tuition.)

44.121 Private Instrumental or Vocal Study (1)

Limited to students not majoring in music or music majors on secondary instruments.

Prerequisite: For Piano Students: 43.116 or equivalent background. Fee, \$50.

44.122 Private Instrumental or Vocal Study (2)

Limited to students not majoring in music.

Prerequisite: For Piano Students, 43.116 or audition. Fee, \$100.

44.131 Private Instrumental or Vocal Study (1)

Limited to students majoring in music.

Prerequisite: For Piano Students, 43.116. Fee, \$30.

44.132 Private Instrumental or Vocal Study (2)

Limited to students majoring in music.

Prerequisite: For piano students, 43.116 or audition. Fee, \$60.

44.221 Private Instrumental or Vocal Study (1)

Limited to students not majoring in music or music majors on secondary instruments.

Prerequisite: 44.121 or equivalent. Fee, \$50.

44.222 Private Instrumental or Vocal Study (2)

Limited to students not majoring in music.

Prerequisite: 44.122 or equivalent. Fee, \$100.

44.231 Private Instrumental or Vocal Study (1)

Limited to students majoring in music.

Prerequisite: 44.131 or equivalent. Fee, \$30.

44.232 Private Instrumental or Vocal Study (2)

Limited to students majoring in music.

Prerequisite: 44.132 or equivalent. Fee, \$60.

44.321 Private Instrumental or Vocal Study (1)

Limited to students not majoring in music or music majors on secondary instruments.

Prerequisite: 44.221 or equivalent. Fee, \$50.

44.322 Private Instrumental or Vocal Study (2)

Limited to students not majoring in music.

Prerequisite: 44.222 or equivalent. Fee, \$100.

44.324 Private Instrumental or Vocal Study (4)

Enrollment limited.

Prerequisite: Audition and permission of Department Chairman. Fee, \$60.

- 44.331 Private Instrumental or Vocal Study (1)**
 Limited to students majoring in music.
Prerequisite: 44.231 or equivalent. Fee, \$30.
- 44.332 Private Instrumental or Vocal Study (2)**
 Limited to students majoring in music.
Prerequisite: 44.232 or equivalent. Fee, \$60.
- 44.421 Private Instrumental or Vocal Study (1)**
 Limited to students not majoring in music or music majors on secondary instruments.
Prerequisite: 44.321 or equivalent. Fee, \$50.
- 44.422 Private Instrumental or Vocal Study (2)**
 Limited to students not majoring in music.
Prerequisite: 44.322 or equivalent. Fee, \$100.
- 44.424 Private Instrumental or Vocal Study (4)**
 Enrollment limited.
Prerequisite: Audition and permission of Department Chairman. Fee, \$60.
- 44.431 Private Instrument or Vocal Study (1)**
 Limited to students majoring in music.
Prerequisite: 44.331 or equivalent. Fee, \$30.
- 44.432 Private Instrumental or Vocal Study (2)**
 Limited to students majoring in music.
Prerequisite: 44.332 or equivalent. Fee, \$60.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600- and 700-level courses are open only to graduate students.)

HISTORY AND LITERATURE

- 43.500 The Baroque Era (3)**
 The emergence and development of vocal and instrumental musical styles and techniques from Monteverdi to Bach and Handel; lectures illustrated with recordings; taped listening assignments.
Prerequisite: 43.301 or concurrent registration.
- 43.501 The Classic Era (3)**
 The growth of new musical forms and ideas from the pre-classicists to Haydn, Mozart and Beethoven; lectures illustrated with recordings; taped listening assignments.
Prerequisite: 43.301 or concurrent registration.
- 43.502 The Romantic Period (3)**
 Historical and cultural background; intensive study of the composers and works of the period; emphasis on individual styles; nationalism, program music.
Prerequisite: 43.301.
- 43.503 Music of the Twentieth Century (3)**
 A survey of contrasting musical ideas and attitudes from 1900 to the present, with emphasis on the styles of selected major composers; lectures illustrated with recordings; taped listening assignments.
Prerequisite: 43.301.
- 43.504 Chamber Music Literature (3)**
 Historical and stylistic survey of string quartet and other small ensemble literature from the Baroque to the Twentieth Century.
Prerequisite: 43.301 or concurrent registration.

43.505 Orchestral Literature (3)

Historical and stylistic survey through comprehensive analysis of specific representative works.

Prerequisite: 43.301 or concurrent registration.

43.506 The Opera (3)

Development of operatic style through study of representative works from 1600 to the present.

Prerequisite: 43.301 or concurrent registration.

43.510 Bibliography and Research Techniques (3)

Bibliographical studies; transcription of early notations; preparation of papers for written or oral presentation.

Prerequisite: 43.301.

43.555 Collegium Music (1)

Rehearsal and performance of vocal and instrumental music with emphasis on music composed before 1750; use of departmental collection of replicas of early instruments.

Prerequisite: Audition.

43.570 Music in Worship (3)

An historical survey of music in both fixed and free liturgies.

Prerequisite: 43.301.

43.670 Seminar in Church Music (3)

Studies in pre-selected areas of church music. May be repeated for credit if no duplication is involved.

Prerequisite: 43.570 or concurrent registration.

43.680 Medieval Music (3)

Advanced study of music in the Middle Ages with special attention to origin and development of musical forms, illustrated by recordings; taped listening assignments.

Prerequisite: 43.301.

43.701 Renaissance Music (3)

Intensive study of forms, style, techniques, and musical thought of the period; lectures illustrated with recordings; taped listening assignments.

Prerequisite: 43.301.

43.797 Master's Thesis Seminar (3-6)

Prerequisite: 43.510 for all candidates preparing a research thesis; 43.703 for Theory-Composition majors. Permission of Department Chairman required.

THEORY

43.507 Fugue (3)

Study of techniques of eighteenth century fugal style through analysis and creative writing.

Prerequisite: 43.205.

43.515 Advanced Conducting (3)

The conductor's role in the preparation and presentation of the more complex masterworks. Students will be expected to participate in laboratory conducting experiences.

Prerequisite: 43.306 and 43.307 or the equivalent.

43.700 Analytical Studies (3)

Analysis of specified works, composers, styles, idioms, forms. Period covered is announced when offered. May be repeated for credit.

Prerequisite: 43.305.

43.703 Advanced Composition (3)

Guidance in writing large forms. Assignments adapted to individual needs and talents. May be repeated for credit.

Prerequisite: 43.316.

43.704 Twentieth Century Counterpoint (3)

Study of important contrapuntal styles of the past sixty years through analysis. Practical creative writing problems in each style studied.

Prerequisite: 43.305.

MUSIC EDUCATION

43.540 Introduction of Graduate Study in Music Education (3)

Methods of research, bibliographical materials, library resources, and study techniques directed specifically toward music education objectives. Required of all graduate students in Music Education.

43.550 Pedagogy I (2)

A seminar to explore concepts of vocal and instrumental performance and their application to teaching in the private studio.

Prerequisite: Permission.

43.551 Pedagogy II (2)

A survey of literature and the teaching of instrumental and vocal techniques.

Prerequisite: 43.550.

43.560 Music Education Workshop (Instrumental) (4)

Advanced study of instrumental music in the elementary, junior and senior high school. May be repeated for credit.

Prerequisite: 43.360.

43.561 Music Education Seminar (Vocal) (3)

Advanced study of vocal music in the elementary junior and senior high school.

Prerequisite: 43.361 and 43.362.

43.740 Supervision and Administration of Music Education (3)

Nature and scope of supervision, supervisory relationships, procedures and techniques; organization and improvement of music curricular, administration of music programs and development of evaluative criteria.

43.760 History and Philosophy of Music Education (3)

Music in history and the practices of teaching music in historical perspective; correlation of philosophies in music and music education.

APPLIED MUSIC

44.791 Private Instrumental or Vocal Study (1)

May be repeated up to six hours by a Master's Degree candidate in performance. Others limited to four hours.

Prerequisite: 44.432 or equivalent and written permission of the Department. Fee, \$50.

44.792 Private Instrumental or Vocal Study (2)

Prerequisite: 44.432 or equivalent and written permission from the Department.

Fee, \$100.

Speech Arts

Professors:

P. COWLES STRICKLAND
J. H. YOCUM

Associate Professors:

J. A. HENDRIX
JEROME B. POLISKY (*Chairman*)

Assistant Professors:

KENNETH BAKER
BORIS BARANOVIC

Professorial Lecturers:

LOUIS FRANA

Lecturers:

SARA BEST
MARY L. TOWNSHEND

UNDERGRADUATE DEGREE Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities are normally satisfied by major and related requirements.	
	Consult department.	(12 hours)
	Science and Mathematics	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Departmental Requirement MAJOR COURSES (30 hours)
67.122 Introduction to Theatre; 67.150 Argumentation; 67.170 Oral Interpretation; minimum of 21 additional hours in consultation with departmental adviser. Undergraduates will follow one of four major programs to be worked out with their advisers and the consent of the department chairman. These four programs include general speech; rhetoric and public address; theatre; technical theatre. All seniors will be required to take the Graduate Record examination.

RELATED COURSES (15 hours).

Minimum of 15 hours outside the department chosen in consultation with advisor.

TOOL COURSES

None

Electives To complete minimum of 120 hours plus non-credit physical education.

The Department of Speech Arts, recognizing the fact that Forensics and Theatre are indispensable components of the curriculum of the Speech Arts Department, expects all majors to participate actively in one or both of these laboratory courses. Because of the laboratory time involved, students majoring in speech should normally not carry more than 15 credits plus physical education during the first two years.

GRADUATE DEGREE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

Master of Arts

Course Requirements Minimum of 30 hours of approved graduate work including 67.602 Research Seminar in Speech Arts (3), and 67.797 Master's Thesis Seminar (3-6).

Written Comprehensive Examinations Two, including one in a core field of one of the major department areas: rhetorical theory and public address, theatre; and one in a specialized field which must be in the Department of Speech Arts. Or one 8 hour comprehensive covering the general area of Speech Arts.

Other Requirements Thesis and oral defense of thesis. In place of a thesis, the student may elect to write two research papers. The graduate student majoring in theatre can fulfill the thesis requirement by (1) writing a research paper and (2) writing and/or producing a play. Students who elect a "non-thesis option" will be expected to present an oral defense of their projects.

Graduate Comprehensive Fields CORE FIELDS
67.001 Rhetorical Theory and Public Address; 67.002 Theatre

SPECIALIZED FIELDS

67.010 Speech Pedagogy

67.011 Rhetorical Theory

67.012 History and Criticism of Public Address

67.020 Theatre History

67.021 Theatre Production

67.040 Writing for Broadcasting and Theatre

67.041 Motion Picture and Television Film Production

UNDERGRADUATE COURSES

67.110 Public Speaking (3)

The principles of public speaking, sound standards for evaluating speeches, and practice in the preparation and presentation of several types of public addresses.

67.116-119 Practicum (1)

A laboratory practicum in the several areas of the Department of Speech Arts: Rhetoric, Public Address, and Theatre.

Prerequisite: consent of the Department Chairman.

- 67.122 Introduction to Theatre (3)**
Survey of the various phases of contemporary theatre in relationship to its historical development, dramatic literature, and aesthetics.
- 67.123 Stagecraft (3)** (formerly 67.222)
Survey of technical aspects of contemporary dramatic productions in relationship to the historical development of the physical theatre with emphasis on application through laboratory practice.
- 67.150 Argumentation (3)** (formerly 67.210)
The use of reason, the nature and forms of argument, the structure of argumentative discourse, and the relationship of delivery to effective argument.
- 67.151 Persuasion and Discussion (3)** (formerly 67.311 Persuasion)
The nature and role of communication in group discussion and group problem solving, plus the theories and techniques of persuasion.
- 67.170 Oral Interpretation (3)**
Analysis, interpretation, and practice in expressive reading of literature to develop ability in sharing literature with an audience.
- 67.320 Scene Design I (3)** (formerly Technical Practices II)
Introduction to the fundamentals of perspective drawing and the graphic presentation of floor plans and elevations for design in the performing arts. Laboratory.
Prerequisite: 67.123.
- 67.321 Stage Lighting (3)** (formerly 67.423 Technical Practices III)
The study of lighting instruments, control boards, and the use of lighting as an integral part of the play's design for the performing arts. Laboratory.
Prerequisite: 67.123.
- 67.322 Stage Movement (3)** (formerly 67.271 Pantomime)
A concentration on the analysis and understanding of the body movement as the actor's visual means of communication with an audience.
- 67.323 Theory of Acting (3)** (formerly 67.372 Principles of Performance I)
The study and analysis of the basic principles and theories, and philosophical origins of the dramatic performance as expressed through any of the contemporary entertainment media.
Prerequisite: 67.322.
- 67.324 Technique of Acting (3)** (formerly 67.471 Principles of Performance II)
The analysis of the actor's problem through a detailed exploration of the craft and techniques of the actor related to the performing arts.
Prerequisites: 67.322, 67.323.
- 67.326 Introduction to Playwriting (3)** (formerly 67.560 Principles of Dramatic Writing)
Special techniques required for dramatic scripts—sketches, originals, adaptation. Emphasis on plotting, characterization, dialogue, pacing, mood.
- 67.350 Introduction to Rhetorical Theory (3)** (replaces 67.494 Seminar in Rhetorical Theory)
Survey of the nature, scope and significance of the tradition of oral Rhetorical Theory as expressed in works of major theorists from antiquity to present. (Non-performance course).
- 67.351 Introduction to Public Address (3)** (replaces 67.495 Seminary in History and Criticism of Public Address)
Critical examination of the ideology, strategy, and techniques of public speakers who have influenced the thoughts and directions of modern democratic and totalitarian societies. (Non-performance course).

- 67.352 Public Address in Contemporary Society (3)** (formerly 67.313 Contemporary Speech Problems)
Study and application of unique problems and techniques involved in composition and presentation of national and international political and diplomatic public address.

ADVANCED COURSES

(500-level courses are open to graduate students and advanced undergraduates; 600-700 level courses are open only to graduate students.)

- 67.502 Seminar in Speech Arts (3)** (formerly 67.492)
A directed comprehensive and interpretive approach to common problems in the areas of broadcasting, rhetorical theory and public address, and theatre. Open to non-majors with consent of instructor.
- 67.510 Advanced Public Speaking (3)** (formerly Speech Composition)
The theory and practice of speech composition with emphasis on style and content.
Prerequisites: 67.150, 67.151, or 67.352 or permission.
- 67.520 Advanced Scene Design (3)** (formerly Scene Design I)
The fundamentals of design for the performing arts, including preparation of sketches and drawings based on the principal styles and periods in theatre.
Prerequisite: 67.320 or permission.
- 67.521 Problems in Scene Design (3)**
Special design problems designed to meet the individual student's interests in design for drama, ballet and opera.
Prerequisite: 67.520.
- 67.532 Directing (3)** (formerly Principles of Performance III)
Direction in the theatre, including comparison with and contrast to the other dramatic media.
Prerequisite: 67.323.
- 67.542 Advanced Directing (3)**
A seminar laboratory course in problems of directing plays for the theatre.
Prerequisites: 67.532 Directing, and consent of the instructor.
- 67.550 History of Theatre I (3)**
The development of the stage and the drama from Greek through Renaissance.
Prerequisite: advanced undergraduate standing.
- 67.551 History of Theatre II (3)**
The development of the stage and the drama from the 17th century to the present.
Prerequisite: 67.550 desirable..
- 67.556 History of the American Theatre (3)**
The theatre in America as a cultural force from the colonial days to the present.
Prerequisite: advanced undergraduate standing.
- 67.560 Dramatic Theory and Criticism (3)** (formerly 23.571)
An investigation of historical criticism as related to modern dramatic theory and criticism. Weekly written criticisms of dramatic productions will be required.
Prerequisites: 67.550-551, plus 12 additional hours of approved drama courses.

- 67.561 Advanced Playwriting (3)** (formerly 67.561 and 67.562 Principles of Dramatic Writing II and III)
Practical experience in writing the full-length play. May be repeated.
Prerequisite: Permission.
- 67.570 Advanced Oral Interpretation (3)**
The preparation of more complex literary forms for platform presentation.
Prerequisite: 67.170 plus 67.323 or consent of the instructor.
- 67.579 Seminar Methods of Teaching Speech (3)** (formerly Methods of Teaching Speech Arts)
Designed to acquaint the prospective speech teacher with the philosophy, theory, practices and methods of speech education.
Prerequisites: 18 hours of Speech, 6 hours Education.
- 67.594 Seminar in Rhetorical Theory (3)** (formerly 67.630)
Study of the works of the principal theorists in the major periods in the development of the body of rhetorical theory. The periods and works studied will be announced from semester to semester as the course is offered. May be repeated for credit.
Prerequisite: graduate standing or permission.
- 67.595 Seminar in History and Criticism of Public Address (3)** (formerly 67.631)
The study of the public address of a specific period or problem area through critical study of the works and methods of its principal speakers. Topics will be announced from semester to semester. May be repeated for credit.
- 67.596 Seminar in Theatre (3)** (formerly 67.496 and 67.640)
The study of specific problems in terms of theatrical presentation or theatre history. Topics will be announced the semester the course is offered. May be repeated for credit.
- 67.602 Research Seminar in Speech Arts (3)**
Required seminar of all graduate students in the Department of Speech Arts. Research problems will vary from semester to semester.
- 67.721 Problems in Technical Theatre (3)**
An intensive survey of all phases of technical theatre for the graduate student.
- 67.797 Master's Thesis Seminar (3-6).**

See also: *Department of English.*

The following courses may be taken for credits in Speech Arts:

- 23.550 Classical Drama (3)
- 23.524 Shakespeare I (3)
- 23.525 Shakespeare II (3)
- 23.522 English Drama: 10th Century to 1642 (3)
- 23.529 Restoration and 18th Century Drama (3)
- 23.538 British Drama: 19th and 20th Centuries (3)
- 23.549 Modern American Drama (3)
- 23.557 Modern European Drama (3)

Department of Journalism, Public Relations, and Broadcasting.

The following courses may be taken for credits in Speech Arts:

- 17.558 History of Motion Pictures (3)
- 17.583 Film Production (3)

DIVISION OF EDUCATION

Education

Professors:

SAMUEL ENGLE BURR, JR.
JOHN W. DEVOR
CHALMER A. GROSS
EDITH H. GROTERBERG
FRANCES HOLLIDAY
PAUL D. LEEDY
RALPH WHITFIELD

Associate Professors:

ROBERT J. CHINNIS
EUGENE V. MORAN
PAUL A. POE
DAVID A. TUCKER
STERLING D. WHITLEY (*Chairman*)

Assistant Professors:

JOHN B. EDGE
VIRGINIA MC CAULEY
CHARLES VAN WAY
JOHN WAKEFIELD

Adjunct Professors:

WILMER F. BENNETT
LETITIA W. BROWN
HOWARD L. DIDSBURY, JR.
HENRY C. GREGORY
WILLIAM H. JENKINS
DANIEL B. LLOYD
STANLEY V. SMITH
WARD STEWART

Professorial Lecturers:

MARJORY AZAROWICZ
HARVEY BANKS
ARTHUR C. F. GILBERT
BERENICE LAMBERTON
EDNA K. MONSEES
ROBERT PARLIER
JAMES F. ROGERS
EDWARD H. RUPP
G. ALLEN SAGER
ESMA A. SHIELDS

SYLVIA K. SHUGRUE

TOM W. SILLS

PETER V. SWINDLER

MATTHEW J. WHITEHEAD

LAWRENCE WINKLER

Lecturers:

NEAL B. ANDREGG

RICHARD CORTRIGHT

CHARLES J. GRANADE

HENRIETTA GULA

OLIVIA HUDES

HOMER H. KEMPFER

THOMAS E. MC INVILLE

KATHARINE F. TIFT

UNDERGRADUATE DEGREES

Bachelor of Arts in Elementary and Early Childhood Education

Admission (Effective, September, 1966)

Admission to the University does not guarantee admission to a program of teacher education. The following factors are considered by the Committee on Admission to Undergraduate Programs of Teacher Education in admitting students to such a program: *a cumulative grade point average of 1.5 (C+)* grades in English, General Psychology and in previous courses in education; test scores of SCAT and CEEB or the equivalent; personality factors related to teacher effectiveness as judged by academic and education professors and expressed in writing; and psychological evaluation, if deemed necessary by the Committee on Undergraduate Admissions. The decision of the Committee on Admissions may be appealed to the University Committee on Teacher Education. Students who plan to prepare for the teaching profession should be assigned to advisers in teacher education when they are admitted to the University.

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Humanities	(12 hours)
	Science and Mathematics	(12 hours)
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Elemental Requirements Area of Concentration other than Education: Students majoring in elementary education are required to have an area of concentration consisting of a minimum of 24 semester hours of work in an academic subject-matter field. Eighteen semester hours must be in advanced courses (300 and 400 level). A detailed list of recommended courses in the various fields is available in the Department of Education offices.

MAJOR COURSES (24-27 hours)

(a) 21.302 Foundations of Education: Social and Historical Bases: Philosophical and Psychological Principles (6 hours)

Required of all students in either elementary or secondary education. Equivalent courses which have been taken previous to registration at The American University may be substituted for part or all of the fields represented in this course.

(b) 21.350 Methods and Materials in Elementary and Early Childhood Education: General and Special, Reading, Language Arts, Social Studies, Mathematics, and Natural Sciences (9 hours)

Opportunities for observation and participation in elementary schools in the Washington area are provided.

(c) 21.444 Student Teaching: Elementary and Early Childhood: Grades K through 6 (9 or 12 hours)

Twelve or sixteen weeks of fulltime observation, participation and actual teaching are required, depending upon the number of hours of credit desired.

RELATED COURSES

To make a total of 42 semester hours of work in major and related courses. A detailed listing of related courses which are recommended is available in the Department of Education offices. Related courses must be chosen from departments other than education.

TOOL COURSES

None

Electives To complete minimum of 120 hours plus non-credit physical education.

Bachelor of Arts in Secondary Teaching

Admission Same as for major in Elementary and Early Childhood Education.

Major Undergraduate students planning to teach in secondary schools *must major in the field in which they plan to teach.*

They should complete courses 57.200, General Psychology, as a part of their University requirements, and the following courses in professional education:

(a) 21.302 Foundations of Education: Social and Historical Bases: Philosophical and Psychological Principles (6 hours)

(b) 21.340 Methods and Materials in Secondary Education: General and Special: English, Foreign Languages, Mathematics, Natural Sciences, and Social Studies (4 hours)

Methods courses in music, art, and physical education are offered in the respective departments.

Opportunities for observation and participation in secondary schools are provided.

(c) 21.445 Student Teaching: Secondary Schools. Grades 7 through 12 (9 or 12 hours).

Nine weeks of full-time observation, participation, and teaching are required for nine semester hours of credit and twelve weeks for twelve semester hours of credit.

(d) Any other courses required for teacher certification in the state in which the student plans to teach.

GRADUATE DEGREES

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult departmental offices for the latest information.)

MASTER DEGREES

The Department of Education offers two degrees in education at the master's level: the degree of Master of Education and the degree of Master of Arts in Education. Each of these degrees has its discrete orientation and addresses itself to the singular need of the student. The degree of Master of Education is appropriate for professional educators: teachers at all educational levels, education in its broader aspects and relationships. The degree of Master of Arts in Education is structured to meet the needs of those who, while they are primarily concerned with professional activities which are essentially educational in nature, yet prefer to emphasize the academic or research aspects of their educational interests. The degree of Master of Arts in Education may be thus more appropriate for teachers of a particular academic subject or research and field workers whose concerns with education are somewhat different from those of the classroom teacher or the school administrator.

Master of Education

Prerequisites The prior preparation of a candidate should include one course in general psychology or the equivalent; one course in statistics; a minimum of nine semester hours of undergraduate and/or graduate credit in education; and an acceptable score on the *Graduate Record Aptitude Examination*. A student who seeks the Master of Education degree must meet the requirements for a teacher's certificate in some state in elementary or secondary education. Certification requirements universally require student teaching (or successful teaching experi-

ence) or a teaching internship such as 21.691 In-service Training Project: Internship in Education. A student may be admitted to a master's degree program only after all prerequisites are met.

Course Requirements In no case will a program for a master's degree require less than thirty credit hours, and some programs will require additional credit hours. Courses required of all candidates are
 21.501 Philosophy of Education
 21.520 Advanced Psychology of Education
 21.795 Research Seminar in Education I and
 21.796 Research Seminar II (or
 21.691 In-service Training Project: Internship in Education, nine hours.)

A maximum of twelve hours of credit may be taken in a department other than the Department of Education if the student plans to take one comprehensive examination in a field outside of education. (Credit in an academic area is a requirement for the Advanced Professional Certificate in the State of Maryland.)

Written Comprehensive Examinations Two are required, including one in a core field; and the other in another of the core fields, or in a specialized field of education, or in a field outside of education, if approved by the Department of Education and the Department outside of education. (See detailed literature in the Department of Education.)

Thesis Comprehensive Examination Fields See listing below under Master of Arts.

Master of Arts

Prerequisites Same as for Master of Education degree.

Course Requirements Same as for Master of Education degree, except that course 21.797 Master's Thesis Seminar must be taken in place of 21.796 Research Seminar in Education II, and a thesis must be written. (See detailed literature in Department of Education.)

Written Comprehensive Examinations Two are required, including one in a core field of education, and one in a field outside of education.

Other Requirements Thesis and oral defense of thesis.

MASTER OF EDUCATION AND MASTER OF ARTS DEGREES

Thesis Comprehensive Examination Fields CORE FIELDS

21.001 Psychology of Education
 21.002 History and Philosophy of Education

SPECIALIZED FIELDS

21.006 Educational Administration
 21.008 Comparative Education
 21.009 Special Education
 21.016 Educational Psychology and Counseling
 21.061 Supervision and Curriculum Development: Reading
 21.062 Supervision and Curriculum Development: Social Studies
 21.063 Supervision and Curriculum Development: Natural Sciences

DOCTORAL DEGREES

The Department of Education offers two degrees in education at the doctoral level: the degree of Doctor of Education and the degree of Doctor of Philosophy in Education. Each of these degrees has its own discrete orientation and addresses itself to the singular need of the student. The degree of Doctor of Education is appropriate for professional educators: teachers at all educational levels, administrative and supervisory personnel, and all others who are engaged primarily in activities of a purely educative nature. The degree of Doctor of Philosophy in Education is structured for those whose professional orientation to education is not so closely related to classroom activity but rather to research specialization, or who may wish to relate education to a particular subject area or academic field.

Qualitatively and quantitatively the degrees are coequal. Their differences lie only in the need to structure each degree program to the professional objectives of the student.

The specific differences between the programs for these doctoral degrees are set forth in the following paragraphs.

Doctor of Education

Prerequisites Master's degree or equivalent, with a minimum of eighteen (18) semester hours of undergraduate and/or graduate work in education; one course in General Psychology or the equivalent; courses to meet the requirements for certification at the elementary or secondary level; a satisfactory score on the Graduate Record Aptitude Examination; and satisfactory completion of the Department of Education Qualifying Examination for the doctorate. (All prerequisites must be completed before admission to the program.)

Course Requirements See page 42

Minimum of 72 semester hours of approved graduate work, including 21.520 Advanced Psychology of Education (3 hours), 21.610 Advanced Psychology of Education (3 hours), 21.795 Research Seminar in Education I (3 hours), and 21.799 Doctoral Dissertation Seminar (12 hours).

Written Comprehensive Examinations Four, including the two from the core fields in education which are required of all doctoral candidates, a third from a specialized field in education, and a fourth from either another specialized field in education, or a field outside of education.

Other Requirements (1) Two consecutive semesters* of full-time residence work at The American University,
(2) dissertation and oral defense of dissertation, (See detailed literature in the Department of Education.) and
(3) proficiency in two tools of research: (quantitative or languages).
The tool examination in Educational and Psychological Measurement and Evaluation, which is given by the Department of Education, is administered on the Saturday following the first school week in January and the first Saturday in June each year.

* A summer session is not considered as a semester in residence.

duate Comprehensive Examination Fields See Listing below under Doctor of Philosophy.

Doctor of Philosophy

Prerequisites Same as for Doctor of Education degree.

Course Requirements Same as for Doctor of Education degree, except that sufficient course work must be taken in one field outside of education to enable the students to demonstrate competence in one comprehensive examination in that field.

Written Comprehensive Examinations Four, including the two in core fields in education which are required of all doctoral candidates, one in a specialized field in education, and one in a field outside of education, to be chosen from areas which are commonly known as the liberal arts. The field outside of education may be from another professional field if the student's anticipated occupation warrants it, and if both the Department of Education and the department or school involved approve.

Other Requirements Proficiency in two tools of research, one of which must be a foreign language, and two consecutive semesters * of full-time residence work at The American University. The dissertation for the Doctor of Philosophy degree must be a theoretical, pure-research type of study which will be of universal value as a contribution to knowledge. (See detailed literature in the Department of Education offices.)

DOCTOR OF EDUCATION AND DOCTOR OF PHILOSOPHY DEGREES

aduate Comprehensive CORE FIELDS

Examination Fields 21.004 Psychological Foundations of Education
21.005 Historical and Philosophical Foundations of Education

SPECIALIZED FIELDS

21.006 Educational Administration
21.008 Comparative Education
21.009 Special Education
21.016 Educational Psychology and Counseling
21.019 Educational Research (1969)
21.017 Student Personnel Services in Higher Education
21.061 Supervision and Curriculum Development: Reading
21.062 Supervision and Curriculum Development: Social Studies
21.063 Supervision and Curriculum Development: Natural Sciences

LANGUAGES

French, Spanish, German, or another foreign language by special permission of the Language Department.

QUANTITATIVE

Statistics, Evaluation, or another tool by special permission of the department involved.

* A summer session is not considered as a semester in residence.

Inter-Departmental Program For information on The Master of Science in Teaching program see the description of the offerings of The College of Continuing Education.

For information on The Master of Science in Science Teaching program see the description of the offerings of the various departments of Natural Sciences and Mathematics.

Professional Certificates For information regarding professional certificates that are offered by the Department of Education see the general information on Graduate Programs, page 57 of this publication and detailed literature of the Department of Education.

UNDERGRADUATE COURSES

21.250 Mathematics for Elementary School Teachers (3)

A course designed to provide pre-service elementary school teachers with an adequate background in the mathematics which they are expected to teach.

Prerequisite: 41.100, or equivalent. Fall, Spring, and Summer.

21.302 Foundations of Education: Social and Historical Bases: Philosophical and Psychological Principles (6)

A block-type course including history of education, educational sociology, psychological, sociological and physiological factors of human growth and development and the learning process. Prerequisite to all other courses in the Department. Laboratory experiences are provided throughout the course.

Prerequisite: 57.200 and a grade point average of 1.3. Fall, Spring, and Summer.

21.305 Group Dynamics and Administrative Principles (3)

Systematic study of major characteristics and functions of face-to-face groups; cohesiveness, goal-setting, decision-making, styles of leadership, and membership rules.

Prerequisite: Junior standing. Fall, Spring and Summer.

21.320 Psychology of Education (3)

Fundamental psychological problems encountered in education. Nature and control of learning; theories of motivation; development of skills and knowledge; creative learning and critical thinking.

Prerequisite: 57.200. Offered only off-campus. Not offered to students who have taken 21.302.

21.340 Methods and Materials in Secondary Education: General and Special: English, Social Studies, Science, Mathematics, and Foreign Languages (4)

A study of general methods and materials and applications to special subjects fields. Laboratory experiences are provided in the university classroom and in secondary schools in the Washington area throughout the course.

Prerequisite: 21.302, or the equivalent, a grade point average of 1.5, and admission to a program of teacher education. Fall and Spring.

21.342 Methods of Teaching in Secondary Schools: General (3)

Study of general teaching methods, with some opportunity to apply these principles to certain specialized subject-matter fields. Laboratory experiences are provided in secondary schools in the Washington area and in the use of educational resources.

Prerequisite: 21.302, or the equivalent, and a grade point average of 1.5. Offered only off-campus. Not offered to students who have had 21.340.

21.345 Children's Literature (3)

Study of classic and contemporary prose and poetry, suited to children's interests and abilities, of the related authors and illustrators, and of the history of such literature. Techniques in guiding children's reading including presentation of books, story-telling, and choral reading.

21.350 Methods and Materials in Early Childhood and Elementary Education: General and Special: Reading, Language Arts, Mathematics, Social Studies, and Natural Sciences (9)

Study of materials and methods for use in teaching the various elementary school subjects. Laboratory experiences are provided in the university classroom, in elementary schools in the Washington area, and in the use of other educational resources.

Prerequisite: 21.302, or the equivalent, a grade point average of 1.5 and admission to a program of teacher education.

21.440 The Teacher and Educational Administration (3)

Study of administrative duties and relations of the teacher with reference to guidance, curriculum and financial responsibilities. Includes consideration of those phases of school work involving cooperation between or among teachers, supervisors and administrative officers.

Prerequisites: 21.302 and 21.340 or 21.350, or the equivalents. Fall and Spring.

21.444 Student Teaching: Early Childhood and Elementary (9-12)

Actual observation, participation, and teaching. Grades K through 6. Conferences arranged with university supervisor and seminars are held at frequent intervals. May be repeated, but student may not earn more than 12 hours in this course. Fee (in addition to tuition) \$10 per credit hour up to a maximum of \$80 for 9 or 12 credit hours.

Prerequisite: Senior status, 21.302 and 21.350, or the equivalents, a grade point average of 1.5, and admission to a program of teacher education. Fall and Spring.

21.445 Student Teaching: Secondary Schools (9-12)

Actual observation, participation, and teaching. Grades 7 through 12. Conferences arranged with university supervisor and seminars are held at frequent intervals. May be repeated, but student may not earn more than 12 credit hours in this course. Fee (in addition to tuition) \$10 per credit hour up to a maximum of \$80 for 9 or 12 credit hours.

Prerequisite: Senior status, 21.302 and 21.340, or the equivalents, a grade point average of 1.5, and admission to a program of teacher education. Fall and Spring.

ADVANCED COURSES

(500-level courses are graduate courses and will be so structured in content and requirement. Seniors with a grade point average of 1.75 may elect 500-level courses with permission of the instructor. 600 or 700-level courses are open only to graduate students).

CORE COURSES IN EDUCATION

21.501 Philosophy of Education (3)

A course for graduate students and seniors, emphasizing the processes, purposes, and methods of education, with special reference to the organization of the school and its curriculum. Required for all master's and doctor's degree programs.

Prerequisite: permission. Fall and Summer.

21.520 Advanced Psychology of Education (3)

Psychological principles, research methods basic to education. Consideration of motivation, attitudes, mental abilities, psychology of school subjects. Required of all students taking master's and doctor's degree programs.

Prerequisite: 21.302 or 21.320.

Fall, Spring, and Summer.

21.610 Philosophy of Education: Advanced (3)

Study of doctrines and principles underlying public and private education in America. Special consideration of purposes, processes, and methods of elementary and secondary education. A seminar-type course open only to graduate students. Required for all doctor's degree programs.

Prerequisite: 21.501, or the equivalent.

Spring.

FOUNDATIONS OF EDUCATION

21.500 History of Education in Western Culture (3)

The development of Western education from ancient Greece to modern times, emphasizing social, intellectual, religious, economic, and political factors; individual philosophers, and actual educational practices.

Prerequisite: permission.

Fall and Summer.

21.527 Mental Health in Schools (3)

Study of the development of wholesome relationships involving administrators, teachers, pupils, and other educational personnel. Some phases of the daily work of the teacher in the area of good mental hygiene are considered.

Prerequisite: 21.520 or permission. Fall and Summer.

21.612 History of Education in the United States (3)

The development of American education from colonial times to the present; emphasizing cultural forces, intellectual currents, dominant philosophies, actual practices, and major educational problems as related to elementary, secondary and higher education.

Prerequisite: 21.500 or permission. Spring.

21.646 Learning Theories in Education (3)

Survey of the major theories of learning developed by psychologists. Study of selected research in human learning and the fundamental principles of the learning process.

Prerequisite: 21.520. Spring.

EDUCATIONAL ADMINISTRATION

21.504 Evaluation of Student Progress (3)

Materials and methods for use in evaluating student progress, especially at the elementary and secondary school levels. Required of most students working on graduate degree programs in education.

Prerequisite: One course in statistics. Fall, Spring, and Summer.

21.650 Essentials of School Law (3)

Study of the laws governing education in the United States, with special reference to the District of Columbia, Maryland, and Virginia.

Prerequisite: Permission. Spring.

21.660 School Administration (3)

A course designed to help prospective elementary and secondary school administrators acquire better knowledge and understanding of administrative principles, concepts, and practices which are used in the schools.

Prerequisites: 21.302, 21.350 and teaching experience. Fall or Summer.

21.663 Problems of School Management (3)

A problem approach to the study of internal school management; administrative problems related to pupil and teacher personnel.

Prerequisite: 21.660 or the equivalent. Spring.

21.664 Financial and Business Administration for Schools (3)

School budgets, bonds, and taxes. Selecting, buying and distributing supplies and equipment. Accounting systems for finances and material. Other business aspects of education.

Prerequisite: 21.660 or the equivalent. Spring.

SUPERVISION AND CURRICULUM DEVELOPMENT

21.640 Curriculum Construction (3)

Psychological, cultural, and educational bases of elementary and secondary school curriculum and higher education. Practice in construction of curricular materials to meet modern educational problems.

Prerequisites: 21.302 and 21.340 or the equivalents. Fall or Summer.

21.670 School Supervision (3)

A course designed for prospective and in-service supervisors for elementary and secondary schools. Purposes and techniques of supervision are discussed.

Prerequisites: qualification for a teacher's certificate and/or teaching experience. Fall, Spring, and Summer.

21.671 Supervision of Student Teachers (3)

A course designed to provide guidance for the supervising teacher and others in their work with student teachers.

Prerequisites: qualifications for a teacher's certificate, and teaching experience. Summer.

READING CURRICULUM

21.523 Foundations of Reading Instruction (3)

A course designed to meet the needs of teachers who feel inadequate to deal with reading disability and the retarded reader. One of the required courses for special certification in reading.

Prerequisite: 21.302 or equivalent. Fall and Summer.

21.524 Methods of Teaching Developmental Reading (3)

A course designed to meet the needs of teachers who are called upon to plan and execute developmental school reading programs at the elementary or secondary level. One of the required courses for special certification in reading.

Prerequisite: 21.523 or equivalent. Summer.

21.632 The Diagnosis of Reading Disability (3)

A course designed to assist the teacher in diagnosing the causes of reading disability and prescribing proper treatment.

Prerequisite: 21.523 or equivalent. Summer.

SOCIAL STUDIES CURRICULUM

21.517 The School and Modern Social Problems (3)

Study and analysis of the social basis of the curriculum. Special reference to pupil needs. Current developments and methods of adapting the school to society.

Prerequisite: permission. Fall.

SCIENCE CURRICULUM

21.519 Physical Sciences for Elementary School Teachers (4)

Recent findings in physics and chemistry, with special reference to science

knowledge expected on the part of the elementary school teacher.
Fall and Off-Campus.

- 21.521 Biological and Geological Sciences for Elementary School Teachers (4)**
Recent findings in the fields of biology and geology with special reference to science knowledge expected on the part of the elementary school teachers.
Spring, Summer, and Off-Campus.

SPECIAL EDUCATION

- 21.516 Special Education for Exceptional Children (3)**
A study of the characteristics of exceptional children and of the problems in providing education programs to meet their needs.
Prerequisites: 21.302, 21.340, or 21.350 or the equivalent. Fall.
- 21.518 Special Education for Retarded Pupils (3)**
Provisions for class work and group activities for retarded children in public and private schools emphasizing methods, materials, and objectives.
Prerequisites: (same as for 21.516.) Spring.
- 21.522 Special Education for Gifted Pupils (3)**
Provisions for class work, group, and individual activities for gifted children in elementary and secondary schools. Emphasis on methods, materials and objectives.
Prerequisites: (same as for 21.516.) Spring.
- 21.624 Diagnosis and Correction of Learning Disabilities (3)**
Diagnosing general and specific learning disabilities. Developmental and remedial techniques for correction of learning disabilities. Clinical experience.
Prerequisites: 21.520 Advanced Psychology of Education, 57.525 Physiological Psychology and permission of instructor. Summer.

EDUCATIONAL PSYCHOLOGY AND COUNSELING

This academic program is designed to prepare qualified individuals as professional educational psychologists, elementary and secondary guidance counselors, and student personnel workers in higher education.

- 21.525 Philosophy and Practices in Educational Guidance (3)**
A basic course in guidance for elementary, secondary and higher education. Among topics considered are: philosophy and practices in guidance, collecting, organizing and using personnel data, group and individual guidance, and the role of teachers, administrators and guidance staff in educational guidance.
Prerequisite: 21.302 or 21.320 or equivalent. Fall and Summer.
- 21.526 Organization and Administration of Guidance Services (3)**
Principles, procedures, and practices in the organization and administration of guidance services. Special attention to selecting staff, in-service training of staff, organizational patterns, ways of initiating a guidance program, and means of evaluating the program.
Prerequisite: 21.302 or 21.320 or equivalent. Summer.
- 21.528 Analysis of the Individual for Purpose of Educational Counseling (3)**
An advanced course in administering and interpreting personality and intelligence tests. Emphasis will be placed in educational and personal analysis of the individual.
Prerequisite: 21.525, Fall.
- 21.630 Techniques of Counseling in Education (3)**
Designed to give the student an understanding of counseling theories and a degree of competence in applying counseling techniques. Students will consider contemporary theories and methods of counseling with practice in interviewing, counseling, and writing case reports.
Prerequisite: 21.525 and 21.528. Spring.

21.635 Student Personnel Services in Higher Education (3)
Philosophical, psychological, and sociological bases for student personnel services. Emphasis will be placed on program, staff, budget, housing, and activities in student personnel services in higher education.
Prerequisites: 21.525, or 21.526. Fall and Summer.

21.643 Vocational Analysis, Information and Placement (3)
Students will administer and interpret vocational tests, develop methods and techniques of preparing and presenting occupational information, review the literature dealing with research and theories in the process of vocational choice, and develop theories and practices in placement.
Prerequisites: 21.525, 21.526, or 21.635. Spring.

21.645 Seminar: Psychological Evaluation (3)
Descriptive and practical use of clinical tests. Considers problems and techniques of psychotherapy. Brief treatments of the theories of Freud, Adler, Jung, Sullivan, Horney, Fromm, Erikson, and Frankle.
Prerequisite: 21.630. Spring.

21.691 In-Service Training Project: Internship in Educational Counseling and Guidance (6-9)
Practicum for advanced students in guidance and personnel services. Under close supervision students will perform intake interviews, counsel with students, prepare case reports or work directly in a specific phase of student personnel services. Research experiences will be included in this practicum.
Prerequisite: permission, only.

21.666 Educational Materials and Techniques (3-6)
Workshop type course, covering selected phases of principles, methods, curriculum construction, administration, guidance, testing, and student personnel services.
Prerequisite: permission, only

EDUCATIONAL RESEARCH

(To be fully developed by 1969. Doctoral level only.)

21.549 Educational Statistics I (3)
Correlation and chi-square (non-parametric statistical methodology)

21.649 Educational Statistics II (3) (to be developed)

COMPARATIVE EDUCATION

21.580 Problems in Federal Educational Policy (3)
Philosophical basis for relationship between American educational systems and government at local, state, and national levels. Comparisons with educational systems abroad. Implications of education for national defense and improved world understanding.
Prerequisite: permission.

21.581 Issues and Programs of International Education (3)
Survey of educational activities designed to improve international relations and world understanding, including the international education exchange programs, technical assistance missions, and UNESCO.
Prerequisite: permission. Spring and Summer.

21.615 Comparative Education I: The Western World (3)
Survey and comparison of educational plans and procedures used in various countries. Greatest attention is directed to education in the United Kingdom, France, Germany, Canada, and Latin American nations.
Prerequisite: permission. Spring and Summer.

21.616 Comparative Education II: The Orient (3)
Similar to 21.615, with emphasis upon the educational programs of the Far

East, rather than the Western World.

Prerequisite: permission.

INSTITUTES

31.532 Institute on Driver and Traffic Safety Education (3)

Fundamentals of safe behavior; causes of risk behavior; history and growth of safety education; physical and emotional characteristics of the driver and the pedestrian; man-made and natural traffic laws; basic accident information; laboratory experience for developing driving skills; function of traffic and highway engineering; accident liability; and role of school personnel in general safety education. Sponsored by the National Association for Driver and Safety Education: N.E.A. Summer.

31.533 Institute on the Behavioral Characteristics of Accident Prevention (3)

Problems of behavior as causes of accidents; basic accident facts and research information; application of principles of social science and human development in teaching safe behavior; and the role of the administrator, teacher and safety specialist in school/community programs. Sponsored by the National Association for Driver and Safety Education: N.E.A. Summer.

31.631 Institute on Reading and Learning Disabilities (3)

Guided experiences in remedial reading, and diagnosis and correction of learning difficulties with children and youth. To be taken in conjunction with 21.624 or 21.632, thus providing students with work toward meeting requirements for teachers of special education, reading specialists, psychologists and counselors, and classroom teachers. Summer.

WORKSHOPS, SEMINARS AND INTERNSHIPS

21.691 In-Service Training Project: Internship in Education (9-12)

Internships in cooperating local school systems by a limited number of properly qualified persons as an integral part of their degree programs.

Prerequisites: advancement to candidacy for M.Ed. or Ed.D. degree; permission of the Chairman, Department of Education, and the Dean of the College of Arts and Sciences. Fall and Spring.

21.710 Seminar in Teaching (3)

To operate as a cycle stressing, from semester to semester the following areas: curriculum construction, public relations, school administration and supervision, educational research, and methods and materials of teaching. (May be repeated for credit.)

Prerequisite: permission. Fall, Spring and Summer.

21.795 Research Seminar in Education I (3)

Fundamentals, methodology, and materials for educational research required of all students who plan to write a master's thesis, a doctoral dissertation, or a thesis option paper.

Prerequisite: permission. Fall, Spring and Summer.

21.796 Research Seminar in Education II (3)

A seminar-type course in which a comprehensive research paper is required. Designed especially for M.Ed. candidates.

Prerequisites: 21.795 and advancement to candidacy for a master's degree. Fall, Spring and Summer.

21.797 Master's Thesis Seminar (3-6)

At least three hours required of all students working on a master's thesis.

Prerequisites: 21.795 and advancement to candidacy for a master's degree. Fall, Spring and Summer.

21.799 Doctoral Dissertation Seminar (3-12)

Required of all students working on doctoral dissertations.

Prerequisites: 21.795 and advancement to candidacy for a doctor's degree. Fall, Spring and Summer.

Health, Physical Education and Recreation

Professor:

DANIEL S. GEISER

Associate Professors:

ROBERT H. FRAILEY (*Chairman*)

VIRGINIA E. HAWKE

JOSEPHINE W. HUBBELL

Assistant Professor:

JAMES D. FRADY

Instructors:

JOANNE M. BENTON

BILLY G. COWARD

LAWRENCE G. NYCE

JOSEPH R. ROGERS

Adjunct Professor:

HUGO SCHULZE

Professorial Lecturers:

RAYMOND A. CISZEK

ROSWELL D. MERRICK

G. OTT ROMNEY

Lecturers:

WALLACE B. HAGERHORST

ALAN H. KYBER

MASAHITO NISHIDA

JOSEPH E. ZOK

UNDERGRADUATE DEGREE Bachelor of Arts

University Requirements	Composition and Reading	(6 hours)
	Physical Education	(4 units—non-credit)
	Majors consult department.	
	Humanities	(12 hours)
	Science and Mathematics	(12 hours)
	Required courses:	
	15.100 Science of Chemistry (3)	
	9.110-9.111 General Biology I and II (8)	
	Social Science	(12 hours)

Language Requirement Through the intermediate level. The number of hours required varies according to the student's prior preparation in language and the courses selected at the University.

Departmental MAJOR COURSES

Requirements *Core courses* (38 hours)

- 49.111 (Men) Football-Wrestling (2)
(Women) Field Hockey-Modern Dance (2)
- 49.112 Soccer-Swimming (2)
- 49.113 (Men) Basketball-Baseball (2)
(Women) Basketball-Softball (2)
- 49.114 Gymnastics-Track and Field (2)
- 49.121 History and Principles of Health, Physical Education and Recreation (3)

- 49.205 The Teaching of Individual, Dual and Recreation Activities (1 each, minimum 4 credits)
- 49.220 First Aid and Athletic Injuries (2)
- 49.310 Elementary School Rhythmic Activities (3)
- 49.320 Methods and Materials in Physical Education (3)
- 49.335 Elementary School Play and Games (3)
- 49.421 Organization and Administration of Health, Physical Education, and Athletics (3)
- 49.424 Kinesiology and Physiology of Exercise (3)
- 49.500 Measurement and Evaluation of Health, Physical Education, and Recreation (3)
- 49.501 Health Education (3)

AREAS OF SPECIALIZATION

The Dance (10 hours)

- 49.210 Workshop in Dance Production (1)
- 49.325 Rhythms and Accompaniment (2)
- 49.326 History and Philosophy of Dance (3)
- 49.400 Advanced Methods of Teaching Modern Dance (1)
- 49.401 Composition of Dance (3)

Athletic Coaching (19 hours)

(For men majoring in other areas desiring professional qualifications for coaching) 49.111, 49.112, 49.113, 49.114 (2 each).

- 49.220 First Aid and Athletic Injuries (2)
- 49.324 Principles and Psychology of Coaching (3)
- 49.421 Organization and Administration of Health, Physical Education, and Athletics (3)
- 49.424 Kinesiology and Physiology of Exercise (3)
and participation in one or more sports (see department adviser)

Elementary Physical Education

Students interested in teaching at the Elementary level consult Department.

RELATED COURSES (25-28 hours)

- 9.222-9.223 Human Anatomy and Physiology (4, 4)
- 21.302 Foundations of Education (6)
- 57.400 Psychology of the Child (3)
or 57.401 Psychology of the Adolescent (3)
- 21.445 Student Teaching (9-12)

TOOL COURSE (3 hours)

- 67.110 Public Speaking (3)

Electives Suggested courses to complete 120 hours plus non-credit physical education.

- 49.222 (Women) Rules and Officiating (2)
- 49.301 Water Safety Instructor (2)
- 49.324 Principles and Psychology of Coaching (3)

GRADUATE STUDIES

The Department of Health, Physical Education and Recreation offers a specialization in Health and Physical Education through the established Master of Arts and Master of Education programs in the Department of Education. Students electing this specialization should take as part of the 15 required hours 49.500 Measurement and Evaluation in Health and Physical Education (3) in place of 21.504 Evaluation of Student Progress (3); and must elect 49.001 Health and Physical Education as one of their two required comprehensive examination fields.

Graduate Comprehensive

Examination Field 49.001 Health and Physical Education

UNDERGRADUATE COURSES

49.010-49.020 Freshman Physical Education I (0)

Instruction in a basic program of gymnastics, sports and dance with a testing program in swimming, health and physical fitness. Required of all entering students who have not satisfied the University Requirements in Physical Education. Tuition, part-time students, regular one-credit hour charge.

49.030 Physical Education Activities (0)

Instruction in the fundamentals of selected sports and recreational activities on both a beginning and intermediate level. Activities include Archery, Badminton, Bowling, Canoeing, Diving, Fencing, Golf, Gymnastics, Horseback Riding, Judo, Life Saving, Modern Dance, Social Dance, and Ethnic Dance, Square Dance, Skin and SCUBA Diving, Swimming, Tennis, Volleyball and Weight Training. Tuition, part-time students, regular one-credit hour charge. *Prerequisite:* 49.010 and 49.020 Freshman Physical Education.

49.103 Physical Education Activities (1)

The same as 49.030. Limited to students who have satisfied the four unit non-credit physical education requirement.

49.111 (Men) Football—Wrestling (2)

(Women) Hockey—Modern Dance (2)

The development of skills, techniques and methods in teaching each sport, including rules and team organization.

49.112 Soccer—Swimming (2)

The development of skills, techniques and methods in teaching each sport, including rules and team organization.

49.113 (Men) Basketball—Baseball (2)

(Women) Basketball—Softball (2)

The development of skills, techniques and methods in teaching each sport, including rules and team organization.

49.114 Gymnastics—Track and Field (2)

The development of skills, techniques and methods in teaching each sport, including rules.

49.121 History and Principles of Health, Physical Education and Recreation (3)

An introduction to the professions of health education, physical education and recreation. Consideration of development, role in general education, and scientific principles guiding the conduct of these programs.

- 49.205 The Teaching of Individual, Dual and Recreational Activities (1)**
The development of skills and methods in teaching Archery, Badminton, Bowling, Fencing, Golf, Square Dance, Tennis, and Volleyball. Course may be repeated four times.
Prerequisite: Permission of Department Chairman.
- 49.210 Workshop in Dance Production (1)**
The development of techniques and the provision of experience in the various phases of dance production. May be repeated for credit.
- 49.220 First Aid and Athletic Injuries (2)**
Techniques of administering immediate and temporary care to an injured person with emphasis on the prevention and treatment of injuries prevalent in athletics.
- 49.222 (Women) Rules and Officiating (2)**
Study of rules and officiating techniques of selected sports. Supervised practice in officiating.
- 49.301 Water Safety Instructor (2)**
Preparation for the teaching of swimming and diving. Techniques of aquatic safety.
Prerequisite: Senior Life Saving.
- 49.310 Elementary School Rhythmic Activities (3)**
Survey of materials and methods of teaching fundamental movement, rhythms and singing games at the elementary school level.
- 49.320 Methods and Materials in Physical Education (3)**
Principles and techniques of instruction applicable to physical education at elementary and secondary school levels.
- 49.324 Principles and Psychology of Coaching (3)**
Principles and techniques of coaching athletic teams with an emphasis on the psychology of teaching and motivating athletes.
- 49.325 Rhythms and Accompaniment (2)**
The development of an awareness of rhythms and an understanding of the basic elements of time; and ability to apply these to dance composition and accompaniment.
- 49.326 History and Philosophy of Dance (3)**
An understanding and appreciation of the contribution of dance to the cultural development of mankind.
- 49.335 Elementary School Play and Games (3)**
Survey and application of physical education and play activities for elementary school children.
- 49.400 Advanced Methods of Teaching Modern Dance (1)**
An understanding of the value of dance education and the development of approaches to teaching dance at the various age levels.
- 49.401 Composition of Dance (3)**
The discovery of a rich movement vocabulary and the ability to organize these into appropriate dance forms.
- 49.421 Organization and Administration of Health, Physical Education and Athletics (3)**
The principles of organizing and administering health, physical education and athletic programs. Consideration of personnel, schedules, equipment, facilities, curriculum, and related problems.
- 49.424 Kinesiology and Physiology of Exercise (3)**
The study of mechanical principles as they apply to the performance of motor skills, and the physiological changes as they occur in the body during and after activity.

ADVANCED COURSES

(500-level courses open to graduate students and advanced undergraduates;
600 level courses open only to graduate students.)

- 49.500 Measurement and Evaluation in Health and Physical Education (3)**
The purposes and principles of measurement and evaluation in health and physical education. Survey of selected tests and basic statistical techniques for interpretation of results.
- 49.501 Health Education (3)**
The content and methods in teaching health education at both the elementary and secondary school levels.
- 49.520 Current Problems, Trends and Research in Physical Education (3)**
The identification of current problems in the profession and a survey and interpretation of research and trends pertaining to them.
- 49.530 Curriculum in Physical Education (3)**
Principles and procedures of curriculum development in physical education.
- 49.550 Recreation Programs (3)**
A survey of agencies and programs in the field of recreation with attention to principles and techniques for conducting these programs.
- 49.601 Workshop in Health, Physical Education and Recreation (3)**
The investigation of a specific timely topic in the area of Health, Physical Education and Recreation. Content will vary with each semester. May be repeated for credit.
- 49.610 Planning Facilities for Health, Physical Education and Recreation (3)**
The principles, criteria, and standards used in planning facilities for Health, Physical Education and Recreation.

ADMINISTRATION

<i>Dean of the College</i>	W. DONALD BOWLES, PH.D.
<i>Associate Dean of the College</i>	JOHN C. SCOTT, PH.D.
<i>Associate Dean of the College</i>	RUTH E. MC FEETER, M.A.
<i>Graduate Counselor</i>	LAURA M. ROWE, M.A.
<i>Associate Program Counselor</i>	FRANCES W. MC DOUGALL
<i>Associate Program Counselor</i>	RUTH E. EARLY, B.A.
<i>Administrative Assistant</i>	KATHERINE H. DORSEY
<i>Receptionist</i>	HARRIET H. COBURN, B.S.

FACULTY ORGANIZATION

<i>Chairman, Dean of the College</i>	W. DONALD BOWLES
<i>Secretary</i>	MARY A. HOOD

Honor Board, College of Arts and Sciences

BEN L. SUMMERFORD (1967)	CARL G. ANTHON (1967)
JEANNE A. ROBERTS (1968)	HAROLD E. DAVIS (1968)
DAVID BRANDENBURG (1969)	THEODORE ROSCHE (1969)

Teacher Education Committee

VIRGINIA E. HAWKE (1967)	A. BUEL TROWBRIDGE (1967)
JOHN H. SMITH (1968)	DOROTHY D. GONDOS (1968)
THOMAS H. HILL (1968)	JOSEPHINE HUBBELL (1969)

Educational Policy Committee

CHARLES M. CLARK (1967)	JAMES H. WEAVER (1968)
ROGER T. SIMONDS (1968)	EDITH GROTBERG (1969)
VADIM MEDISH (1969)	FREDERICK SEYMOUR (1969)

FACULTY

Emeriti SARAH M. BAKER (1945), Pennsylvania Academy of Fine Arts; Academie Montparnasse, Paris; Phillips Memorial Gallery. *Emeritus Professor of Art.*

ERNST CORRELL (1929), Dr. oec. publ., Munich. *Emeritus Professor of Economic History.*

HAZEL H. FEAGANS (1929), B.A., B.E., George Washington; M.A., American. *Emeritus Professor of English.*

JOHN G. FRANK (1948), Ph.D., Munich; Ph.D., Michigan. *Emeritus Professor of Languages and Linguistics.*

JOHN W. FREY (1957), B.S., Chicago; Ph.D., Wisconsin. *Emeritus Professor of Earth Sciences.*

RALPH H. GABRIEL (1958), B.A., M.A., Ph.D., Yale; M.A., Cambridge; Litt.D., Bucknell, Williams; D.H.L., Colgate. *Emeritus University Professor of American Studies.*

FRANK LORIMER (1938), B.A., Yale; M.A., Chicago; B.D., Union Theological Seminary; Ph.D., Columbia. *Emeritus Professor of Sociology.*

FRITZ KARL MANN (1936), Dr. Jur., Goettigen; Ph.D., Berlin. *Emeritus Professor of Economics.*

SIMON NAIDEL (1948), B.S., College of the City of New York; M.A., Columbia; Ph.D., American. *Emeritus Professor of Economics.*

RUBERTA M. OLDS (1930), Ph.B., Chicago; M.A., Columbia. *Emeritus Associate Professor of Languages and Linguistics.*

ERNST POSNER (1939), Ph.D., Berlin. *Emeritus Professor of History.*

WALTER F. SHENTON (1925), B.S., M.A., Dickinson College; Ph.D., Johns Hopkins. *Emeritus Professor of Mathematics.*

BANCROFT W. SITTERLY (1947), B.A., M.A., Ph.D., Princeton. *Emeritus Professor of Physics.*

CHARLES K. TRUEBLOOD (1949), B.S., Earlham College; B.S., Haverford College; M.A., Ph.D., Harvard. *Emeritus Professor of Psychology.*

Honorary RALPH C. JOHN (1949), B.A., Berea College; S.T.B., S.T.M., Boston; Ph.D., American. *Honorary Professor of Religion.*

Full-Time RUDOLPH VON ABELE (1947), B.A., Ph.D., Columbia. *Professor of English.*

RAYMOND W. AIKEN (1957), B.S., M.A., Pennsylvania. *Assistant Professor of English.*

MARY H. ALDRIDGE (1955), B.S., Georgia; M.A., Duke; Ph.D., Georgetown. *Professor of Chemistry.*

RICHARD R. ANDERSON (1966), A.A., Clark Junior College; B.S., Lewis and Clark; M.S., Maryland. *Assistant Professor of Biology.*

CARL G. ANTHON (1961), B.A., Chicago; M.A., Ph.D., Harvard. *Professor of History.* On leave 1967-1968.

W. MICHAEL BAILEY (1966), B.A., North Texas State. *Instructor in Economics.*

KENNETH BAKER (1966), B.A., M.A., Kansas. *Assistant Professor of Speech Arts.*

ESTHER W. BALLOU (1955), B.A., Bennington; M.A., Mills College; Graduate Degree, Juilliard. *Assistant Professor of Music.*

BORIS I. BARANOVIC (1966), B.A. in Dramatics, Amherst. *Assistant Professor of Speech Arts.*

NANCY BARRETT (1966), B.A., Goucher; M.A., Harvard. *Instructor in Economics.*

MERRITT C. BATCHELDER (1935), A.B., Hillsdale; M.A., Columbia; Ph.D., Iowa. *Professor of English.*

ARTHUR P. BEAN, JR. (1963), B.A., M.A., Virginia. *Assistant Professor of English.*

ROBERT LEE BEISNER (1965), M.S., Ph.D., Chicago. *Associate Professor of History.*

JOANNE M. BENTON (1964), B.S., Maryland. *Instructor in Health, Physical Education, and Recreation.*

ROBERT O. BLANCHARD (1965), B.S., M.S., Northwestern. *Assistant Professor of Journalism, Public Relations, and Broadcasting.*

VERA Z. BORKOVEC (1966), M.A., Hollins; M.A., American. *Assistant Professor in Languages and Linguistics.*

W. DONALD BOWLES (1957), B.A., University of Washington; M.A., Ph.D., Columbia. *Professor of Economics.*

LOTHAR BRABANSKI (1957), Master, Academy of Fine Arts, Berlin. *Associate Professor of Art.*

DAVID J. BRANDENBURG (1948), B.S., Bowdoin; A.M., Ph.D., Columbia. *Professor of History.*

ANN BAKER BRAUN (1962), B.A., M.A., Boston; Ph.D., New Hampshire. *Assistant Professor of Chemistry.*

EDWARD J. BREYERE (1961), B.S., M.S., Ph.D., Maryland. *Professor of Biology.*

ROGER H. BROWN (1965), A.B., A.M., Ph.D., Harvard. *Associate Professor of History.*

SUMNER O. BURHOE (1956), B.S., Massachusetts; M.S., Kansas State; Ph.D., Harvard. *Professor of Biology.*

DINSHAW BURJORJEE (1966), A.B., Catholic; M.A., Georgetown. *Instructor in English.*

EDWARD I. BURKART (1960), B.S., M.S., Georgetown. *Assistant Professor of Languages and Linguistics.*

SAMUEL ENGLE BURR, JR. (1947) Litt.B., Rutgers; M.A., Wisconsin; M.A., Columbia; Ed.D., Cincinnati. *Professor of Education.*

EDWARD T. BUTLER, JR. (1966), B.S., American; M.A., American. *Assistant Professor of Earth Sciences.*

TERRELL BYNUM (1967), B.S., B.A., Delaware; M.A., Ph.D., Princeton. *Assistant Professor of Philosophy.*

MARIE A. CHARBONNEAUX (1960), Baccalaureat, Licence en-Droit, University of Paris; Etudes Pratiques d'Anglais, Sorbonne. *Assistant Professor of Languages and Linguistics.*

BENSON T. CHERTOK (1966), B.S., M.S., Massachusetts Institute of Technology; Ph.D., Boston. *Assistant Professor of Physics.*

ROBERT J. CHINNIS (1964), B.S., East Carolina; M.Ed., North Carolina; Ed.D., Maryland. *Associate Professor of Education.*

CHARLES M. CLARK (1941), A.B., M.A., Ph.D., Cornell. *Professor of English.*

CHARLES P. CORN (1964), A.B., Washington and Lee; M.A., George Washington. *Instructor in English.*

BILLY G. COWARD (1964), B.S., B.A., American. *Instructor in Health, Physical Education and Recreation.*

HORACE D. CRAWFORD (1946), A.B., Hillsdale. *Professor of Journalism, Public Relations, and Broadcasting.* On leave Spring, 1968.

DAVID CROSBY (1966), B.A., American; M.A., Arizona. *Assistant Professor of Mathematics.*

CHARLES CROWDER (1960), B.M., Lawrence College; M.A., Columbia. *Assistant Professor of Music.*

PAUL R. CURTIS (1960), B.A., College of Wooster; M.S., Ph.D., Ohio State. *Associate Professor of Biology.*

PAUL DALBEC (1966), B.S., Boston College; M.S., Notre Dame; Ph.D., Georgetown. *Assistant Professor of Physics.*

ROBERT A. D'ARISTA (1961), New York University; Columbia; Academie Grand Chaumiere, Paris. *Assistant Professor of Art.*

CHARLES M. DAVIS (1962), A.B., M.S., Ph.D., Catholic. *Associate Professor of Physics.*

HAROLD E. DAVIS (1947), B.A., Hiram; M.A., Chicago; Ph.D., Western Reserve. *University Professor of Latin American Studies.* (SIS).

DONALD DERBY (1947), B.A., Bowdoin; M.A., Ph. D., Harvard. *Professor of History.*

JOHN W. DEVOR (1956), A.B., M.A., Kansas; Ph.D., Chicago. *Professor of Education.*

GLORIA W. DE WIT (1965), B.S., M.S., Ph.D., Illinois. *Assistant Professor of Physics.*

THOMAS V. DI BACCO (1965), B.A., Rollins; M.A., Ph.D., American. *Assistant Professor of History.*

ERNEST DIBBLE (1965), B.A., Ph.D., American. *Associate Professor of History.*

HAROLD A. DURFEE (1955), Ph.B., Vermont; B.D., Yale; Ph.D., Columbia. *William Frazer McDowell Professor of Philosophy.*

JOHN B. EDGE (1964), B.A., Vanderbilt; M.A., George Peabody. *Assistant Professor of Education.*

PRISCILLA G. ELLIS (1966), B.A., Bradley University; M.A., Michigan. *Instructor in Economics.*

IRENE W. ENO (1959), Cert., Sacker's School of Design. *Associate Professor of Art.*

DONALD H. FLANDERS (1963), B.A., Reed; M.A., Maryland. *Assistant Professor of Mathematics and Statistics.*

ROBERT T. FOLEY (1964), B.S., Massachusetts; M.S., Lafayette; Ph.D., Texas. *Professor of Chemistry.*

JAMES D. FRADY, JR. (1964), A.B., M.Ed., North Carolina. *Assistant Professor of Health, Physical Education, and Recreation.*

ROBERT H. FRAILEY (1949), B.S., M.A., American. *Associate Professor of Health, Physical Education and Recreation.*

MARY D. GARRARD (1964), A.B., Newcomb; A.M., Radcliffe. *Assistant Professor of Art.*

ROBERT F. GATES (1946), Detroit School of Arts and Crafts; Art Students League of New York; Phillips Gallery; Colorado Springs Fine Arts Center. *Professor of Art.*

DANIEL GEISER (1966), A.B. Juniata; M.A., Ohio State; Ed.D., Columbia. *Professor of Physical Education.*

JESSICA W. GOLDIN (1966), B.A., Long Island University; M.A., Columbia. *Assistant Professor in Languages and Linguistics.*

DOROTHY D. GONDOS (1947), B.A., Swarthmore; M.A., Ph.D., Pennsylvania. *Professor of History.*

MARIANO E. GOWLAND (1964), Bachillerato, Buenos Aires. *Instructor in Languages and Linguistics.*

LEROY S. GRAHAM (1960), B.A., American; B.D., Drew Theological Seminary; Ph.D., Drew University. *Assistant Professor of Sociology.*

CHALMER A. GROSS (1959), B.S., M.S., Illinois; Ph.D., Chicago. *Professor of Education.*

EDITH H. GROTEBERG (1963), B.A., Ph.D., Northwestern; M.A., Chicago. *Professor of Education.*

DORIS E. HADARY (1962), B.S., Illinois; M.S., Wisconsin. *Assistant Professor of Chemistry.*

PIERRE HAN (1964), B.A., Catholic; M.A., Ph.D., Columbia. *Associate Professor of English.*

ESTHER HANDLER (1965), B.A., Washington University. *Assistant Professor of Languages and Linguistics.*

CHARLEY DEAN HARDWICK (1967), B.A., Southern Methodist; B.D., Drew Theological School; M.A., Yale. *Assistant Professor of Philosophy and Religion.*

MARK HARRISON (1960), B.S., Northeast Missouri State College; Ph.D., Catholic. *Professor of Physics.*

VIRGINIA E. HAWKE (1950), B.S., M.A., Ohio State. *Associate Professor of Health, Physical Education and Recreation.*

EVELYN SWARTHOUT HAYES (1951), B.M., Kansas; Tobias Matthay Piano School, London. *Associate Professor of Music.*

LON ENDRE HELGEN (1956), B.A., St. Olaf; M.S., Ph.D., Yale. *Assistant Professor of Chemistry.*

J. A. HENDRIX (1965), B.A., East Texas State; M.A., Oklahoma; Ph.D., Louisiana State. *Associate Professor of Speech Arts.*

HELENE MCKINSEY HERZBRUN (1957), B.A., Chicago. *Associate Professor of Art.*

THOMAS H. HILL (1963), B.M., M. Mus., Boston. *Assistant Professor of Music.*

MARJORIE HIRANO (1967), B.E., Hawaii; M.S., Illinois Institute of Technology. *Instructor in Art.*

ZUZEL C. HOLCOMB (1965), Doctor en Pedagogia, University of Havana. *Instructor in Languages and Linguistics. On leave 1967-1968.*

FRANCES HOLLIDAY (1959), B.S., Northwest Missouri State; M.A., Missouri; Ed.D., George Washington. *Professor of Education.*

MARY ANN G. HOOD (1957), B.A., M.A., Michigan State; M.A., American. *Assistant Professor of English.*

JOSEPHINE W. HUBBELL (1962), B.S., William and Mary; M.A., Iowa; Ph.D., New York University. *Associate Professor of Health, Physical Education, and Recreation.*

WARREN S. HUNSBERGER (1966), A.B., Yale College; Ph.D., Yale. *Professor of Economics.*

WILLIAM R. HUTCHISON (1958), B.A., Hamilton; B.A., M.A., Oxford; Ph.D., Yale. *Professor of History*.

JACEK JARZYNSKI (1963), B.Sc., Ph.D., Imperial College, London. *Associate Professor of Physics*.

JEAN T. JOUGHIN (1959), A.B., A.M., Ph.D., Texas. *Professor of History*.

HELMER G. JUNGHAUS (1954), B.S., M.S., Kansas State. *Instructor in Mathematics and Statistics*.

PAMELA H. KACSER (1965), B.A., London; M.S., Cornell; Ph.D., London School of Economics. *Associate Professor of Economics*.

ANDREW S. KECK (1946), B.A., Williams College; M.A., M.F.A., Princeton. *Professor of Art History*. On leave 1967-1968.

FAYE L. KELLY (1962), B.A., M.A., Ph.D., Florida. *Associate Professor of English*.

FRANCES H. KING (1957), B.A., Western College for Women; M.A., Ohio State. *Assistant Professor of English*. On leave 1967-1968.

MONIQUE S. KLEIN (1964), B.A., M.A., Strasbourg. *Assistant Professor of Languages and Linguistics*.

LUYSE KOLLNHOFFER (1966), Ph.D., University of Vienna. *Assistant Professor of South and Southeast Asian Studies*.

BASIL P. KORIN (1961), B.A., Connecticut; M.S., Stanford. *Associate Professor of Mathematics and Statistics*.

ALAN H. KYBER (1965), B.A., Furman; M.A., George Washington. *Lecturer in Health, Physical Education, and Recreation*.

RUTH LANDMAN (1965), B.A., Vassar; M.A., Ph.D., Yale. *Assistant Professor of Anthropology*.

CHARLES LARSON (1965), B.A., M.A., Colorado. *Assistant Professor of English*.

EDDIE D. LEACH (1965), B.A., M.A., Baylor; Ph.D., Texas A and M. *Assistant Professor of Biology*.

HARRY LEE (1958), California Institute of Fine Arts; Pennsylvania Academy of Fine Arts. *Associate Professor of Journalism, Public Relations, and Broadcasting*.

PAUL D. LEEDY (1961), A.B., Dickinson College; M.A., Pennsylvania; Ph.D., New York University. *Professor of Education*.

ROBERT C. LESTER (1962), B.A., Montana State; B.D., M.A., Ph.D., Yale. *Associate Professor of Philosophy and Religion*.

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IRVING I. KRAMER (1957), B.S., College of the City of New York; M.A., Columbia. *Professorial Lecturer in History.*

JOHN KUIPER (1965), B.A., Kentucky; M.A., Ph.D., Iowa. *Adjunct Professor of Journalism, Public Relations, and Broadcasting.*

BERENICE LAMBERTON (1962), B.S., Rhode Island; M.A., Brown; Ph.D., Maryland. *Professorial Lecturer in Education.*

LAWRENCE LAURENT (1964). *Adjunct Professor of Journalism, Public Relations, and Broadcasting.*

ROBERT LAUTMAN (1965), Montana State. *Professorial Lecturer in Art.*

HUBERT LECKIE (1957), Crane College, Art Institute, New Bauhaus School. *Adjunct Professor of Art.*

BARBARA LEFKOWITZ (1965), B.A., Smith; M.A., State University of New York at Buffalo. *Lecturer in English.*

- NEAL ANN S. LEVINE (1967), A.B., Cornell; M.A., Columbia. *Lecturer in Languages and Linguistics.*
- ALICE LINDSAY (1966), B.S., M.A., Pittsburgh. *Lecturer in Philosophy.*
- EUGENE J. LIPMAN (1961), B.A., Cincinnati; M.H.L., Hebrew Union College. *Lecturer in Philosophy and Religion.*
- DANIEL B. LLOYD (1950), B.S., George Washington; M.S., Maryland; M.A., Columbia; Ph.D., Catholic. *Adjunct Professor of Education.*
- NICOLE D. LONG (1962), License de Lettres, University of Paris. *Lecturer in Languages and Linguistics.*
- RITCHIE P. LOWRY (1964), A.B., M.A., Ph.D., California. *Professorial Lecturer in Sociology.*
- WERNER LYWEN (1964), Berlin State Academy of Music. *Adjunct Professor of Music.*
- ANDREJ MACEK (1958), B.S., Georgetown; M.S., Ph.D., Catholic. *Adjunct Professor of Chemistry.*
- BELA C. MADAY (1967), Ph.D., Pazmanz University, Budapest. *Adjunct Professor of Anthropology.*
- JUAN MALDONALDO (1965), B.A., American. *Lecturer in Languages and Linguistics.*
- WILFRED MANN (1959), B.Sc., Ph.D., D.Sc., Imperial College of Science and Technology. *Adjunct Professor of Chemistry.*
- JOHN E. MARLOW (1963), B.A., American. *Lecturer in Music.*
- HELEN MARTZ (1960), B.A., Pennsylvania; Ph.D., Bryn Mawr; M.S.W., Pennsylvania School of Social Work. *Adjunct Professor of Sociology.*
- MAURICE MATLOFF (1965), B.A., Columbia; M.A., Harvard; Ph.D., Yale. *Adjunct Professor of History.*
- IRVING MAY (1964), B.S., City College of New York; M.S., George Washington. *Lecturer in Chemistry.*
- JAMES A. MC CAFFERTY (1959), B.Sc., M.A., Ohio State. *Lecturer in Sociology.*
- HARRY MC CLURE (1963), B.A., Colorado College. *Lecturer in Music.*
- MERRILL T. MC CORD (1967), Bachelor's in Journalism, Kentucky; Master's in Journalism, Stanford. *Lecturer in Journalism, Public Relations and Broadcasting.*
- THOMAS MC INVILLE (1962), B.S., East Tennessee State; M.Ed., South Carolina. *Lecturer in Education.*
- ROSWELL D. MERRICK (1962), B.S., Springfield; M.A., New York; Ed.D., Boston. *Professorial Lecturer in Health, Physical Education, and Recreation.*
- SYLVIA MEYER (1953), B.A., Wisconsin; Artists Diploma and Teacher's Certificate, Peabody Conservatory of Music. *Lecturer in Music.*
- JOSEPH V. MICHALSKI (1963), A.B., Johns Hopkins; Ph.D., Princeton. *Professorial Lecturer in Biology.*
- EDNA K. MONSEES (1967), B.S., University of Missouri; M.A., Ph.D., The American University. *Professorial Lecturer in Education.*
- DONALD T. MOORE (1966), B.F.A., Ohio University; M.F.A., Ohio University. *Lecturer in Journalism, Public Relations and Broadcasting.*
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VIRGIL NORTON (1966), B.S., M.S., Kansas State; Ph.D., Oregon State. *Professorial Lecturer in Economics.*

JOHN J. O'CONNOR (1957), A.B., A.M., LL.B., Ph.D., Georgetown. *Adjunct Professor in Psychology.*

ROBERT PARLIER (1966), A.M., M.Ed., Ed.D., University of North Carolina. *Professorial Lecturer in Education.*

RICHARD PARNAS (1964), Curtis Institute of Music. *Lecturer in Music.*

KENNETH PASMANICK (1962), B.A., American. *Lecturer in Music.*

C. RUSSELL PHELPS (1959), B.S., Hamilton College; M.A., Ph.D., Harvard. *Adjunct Professor of Mathematics and Statistics.*

BERNARD POSNER (1959), A.B., Cincinnati; M.A., American. *Adjunct Professor of Journalism, Public Relations, and Broadcasting.*

ARNOLD H. PRICE (1959), B.A., M.A., Ph.D., Michigan. *Lecturer in History.*

ERNEST S. PRIMOFF (1952), B.A., M.A., New York University. *Adjunct Professor of Psychology.*

SAMUEL E. RAMSAY (1967), Diploma Curtis Institute. *Lecturer in Music.*

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SUDHA V. RAO (1965), B.A., Delhi University, India; Cert., Mt. Holyoke. *Lecturer in Languages and Linguistics.*

VIRGINIA R. RAPPORT (1965), B.A., Meredith College. *Lecturer in English.*

WAYNE D. RASMUSSEN (1953), B.A., Montana State; M.A., Ph.D., George Washington. *Professorial Lecturer in History.*

RALPH ROBIN (1956), B.S., Pittsburgh. *Adjunct Professor of English.*

PRESTON ROCKHOLT (1967), A.B., Wheaton College; M.A., American Conservatory of Music; Ph.D., Northwestern. *Lecturer in Music.*

JAMES F. ROGERS (1966), B.S., M.A., Sul Ross State College; Ph.D., University of Texas. *Professorial Lecturer in Education.*

MORRIS ROSENBERG (1961), B.A., Brooklyn College; M.A., Ph.D., Columbia. *Adjunct Professor of Sociology.*

HARRY ROSENBLATT (1958), B.S., M.S., George Washington. *Adjunct Professor of Mathematics and Statistics.*

MURRAY ROSS (1945), B.S., College of the City of New York; M.A., Ph.D., Columbia. *Adjunct Professor of Economics.*

VERA NEELY ROSS (1954), B.M., Kansas. *Professorial Lecturer in Music.*

GORDON ROTH (1967), B.A., University of Minnesota. *Lecturer in Journalism, Public Relations and Broadcasting.*

ERNEST RUBIN (1950), B.S.S., College of the City of New York; M.A., Ph.D., Columbia. *Adjunct Professor of Mathematics and Statistics.*

EDWARD H. RUPP (1966), A.B., Franklin-Marshall College; M.Ed., Ed.D., University of Maryland. *Professorial Lecturer in Education.*

DIANE RUSSELL (1966), A.B., Vassar. *Professorial Lecturer in Art.*

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BRAM SMITH (1964), Royal Conservatory, Toronto. *Lecturer in Music.*

STANLEY V. SMITH (1956), B.A., Buffalo; M.A., Cornell; Ph.D., Columbia. *Adjunct Professor of Education.*

* Deceased

- ELINOR H. SOLOMON (1965), A.B., Mt. Holyoke; A.M., Radcliffe; Ph.D., Harvard. *Professorial Lecturer in Economics.*
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- VIVIAN E. SPENCER (1963), A.B., M.A., Oberlin; Ph.D., Pennsylvania. *Professorial Lecturer in Mathematics and Statistics.*
- DOROTHY STAHL (1965), B.A., Smith College; Juilliard. *Lecturer in Music.*
- HELEN A. STATT (1964), A.B., George Washington; M.S.Ed., Pennsylvania. *Adjunct Professor of Biology.*
- WARD STEWART (1956), B.A., Carleton College; M.A., Chicago; Ph.D., Harvard; J.D., George Washington. *Adjunct Professor of Education.*
- ROBERT STRAKNA (1965), B.A., M.A., Ph.D., Connecticut. *Professorial Lecturer in Physics.*
- WILLIAM H. STRUHS, JR. (1964), B.S., College of Charleston; M.A., Iowa. *Lecturer in English.*
- PETER V. SWINDLER (1960), B.A., Miami; B.S., M.A., American Professorial Lecturer in Education.
- GEORGE S. SWITZER (1950), A.B., California; A.M., Ph. D., Harvard. *Adjunct Professor of Earth Sciences.*
- JOHN K. TAYLOR (1957), B.S., George Washington; M.S., Ph.D., Maryland. *Adjunct Professor of Chemistry.*
- PRENTISS TAYLOR (1955), Art Students League. *Professorial Lecturer in Art.*
- JOHN G. THEBAN (1961), M.S., Virginia; Cert., New York School of Social Work. *Professorial Lecturer in Sociology.*
- FEODOR THEILHEIMER (1961), Ph.D., Berlin. *Adjunct Professor of Mathematics and Statistics.*
- MARK THOMAS (1961), Diploma, Baltimore City College; Peabody Conservatory of Music. *Professorial Lecturer in Music.*
- KATHARINE F. TIFT (1967), A.B., University of California; M.Ed., The American University. *Lecturer in Education.*
- MARY L. TOWNSHEND (1964), B.A., M.A., American. *Lecturer in Speech Arts.*
- CLAUDIA R. UPPER (1960), B.A., Wellesley; M.A., Michigan. *Lecturer in History.*
- ELIZABETH VAN HOUTVEN (1964), B.S., M.S., Georgetown. *Lecturer in Languages and Linguistics.*
- HILDE VON BRAUNMUEHL (1965), M.A., Freiburg. *Instructor in Languages and Linguistics.*
- HERBERT R. VOSS (1967), M.A., Minnesota. *Assistant Professor of Speech Arts.*
- LELIA E. WASHBURN (1958), M.A., Radcliffe. *Lecturer in History.*
- WILCOMB E. WASHBURN (1961), B.A., Dartmouth; M.A., Ph.D., Harvard. *Adjunct Professor of History.*
- IVOR WAYNE (1950), M.A., Harvard. *Adjunct Professor in Sociology.*
- MARGARET L. WEAVER (1964), A.B., Radcliffe. *Lecturer in English.*

ALFRED WEISSLER (1961), B.S., City College of New York; M.S., Wisconsin; Ph.D., Maryland. *Adjunct Professor in Chemistry.*

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MATTHEW JACKSON WHITEHEAD (1966), A.B., Johnson C. Smith University; M.A., Columbia University; Ed.D., New York University. *Professorial Lecturer in Education.*

ROBERT G. WILLIAMSON (1964), B.S., Wilson Teachers College; M.Ed., D.Ed., Maryland. *Professorial Lecturer in Biology.*

LAWRENCE WINKLER (1966), B.S., Washington University; M.A., Washington University, (St. Louis); Ed.D., George Washington University. *Professorial Lecturer in Education.*

REUVEN YALON (1965), B.A., City College of New York; M.A., American. *Lecturer in Languages and Linguistics.*

JOHN W. YARNALL (1963), A.B., M.A., Washington and Jefferson; Ph.D., Pittsburgh. *Professorial Lecturer in English.*

EDDIE TOK SENG YO (1965), B.A., Dutch Roman Catholic Canisius College. *Lecturer in Languages and Linguistics.*

ELIZABETH L. YOUNG (1966), A.B., Wellesley. *Lecturer in Journalism, Public Relations and Broadcasting.*

ROBERT E. ZIPP (1963), B.Mus.Ed., Northwestern. *Lecturer in Music.*

THE AMERICAN UNIVERSITY
SCHOOL OF BUSINESS ADMINISTRATION
WASHINGTON, D. C. 20016

Dear Reader:

We welcome this opportunity to introduce you to our School. We are young and growing rapidly; proud of our goals, philosophy, and achievements; of our Faculty, alumni, and programs. We hope, after reading this Catalog, you will share our excitement and enthusiasm.

Whether undergraduate or graduate study, consider carefully the many varied and satisfying opportunities available to our graduates. Business is a challenging, exciting, rewarding career field. Our alumni are eagerly demanded, not only by business, but by government, the military, voluntary associations, and even religious and non-profit organizations.

While no school can teach more than a small part of what successful executives must know, and while your future must largely depend on you yourself, the record clearly shows that our School provides an excellent educational foundation for personal and professional growth and achievement.

F. R. Kappel, Board Chairman of American Telephone and Telegraph Co., well expressed the major goal of all organizations: "Our number one aim is to have in all management jobs, the most vital, intelligent, positive and imaginative men we can possibly find." Paul G. Hoffman, business leader, government executive, international public servant, underscored the problem and the opportunity: "The great need of the world today is for one million managers and administrators."

The pages that follow should help you choose wisely both your academic career and after-graduation future. We also urge you to visit our Campus and to write us for further details.

Business now, more than ever before, must have the highest quality of leadership if our free society is to survive. This means that in preparing tomorrow's business leaders, we need students of the highest caliber. But, student caliber must not be defined solely in intellectual terms, or measured primarily by the ability to memorize and recite back information that professor and textbook provide. Executives must make decisions, solve problems, put knowledge to work. Personal characteristics of honesty, integrity, determination, initiative, imagination, alertness, ability to get results through people, and willingness to work and accept responsibility are equally important in executive success.

We seek to do five years work in the four of our undergraduate curriculum, and make even more stringent demands in our graduate programs. We educate today for the demands of tomorrow in a world whose rapid change makes the picture of tomorrow blurred and indistinct. We therefore need superior students, measured by all of the above criteria, if our Faculty is to succeed in its mission.

If you wish an effective, liberalizing education that will help prepare you for a satisfying and rewarding future, and if you can meet our admission standards, we invite your application to our School.

*Sincerely,
Nathan A. Baily, Dean*

SCHOOL OF BUSINESS ADMINISTRATION

"The first School of Business Administration in the Nation's Capital"

History Although The American University conferred degrees in Business Administration in the 1920's and 1930's, the first formally organized and continuous program in Business Administration was established in June 1946. Known as the Business and Industrial Management curriculum, it was an intensive 90 credit certificate program developed for returning veterans on the basis of a special report of the Society for Advancement of Management. Jurisdictionally, the BIM Program was in the Department of Economics.

With the growth in enrollment and the plan to establish a School of Business Administration, this program was expanded to a full four year degree of Bachelor of Science in Business Administration. Majors were established in Accounting and Transportation, then in Real Estate, Advertising, Retailing, Banking, and Personnel. The business programs grew to the largest single area of enrollment in the University and became a Division of Business Studies.

Continued growth was recognized by retitling the Department "Economics and Business Administration" and then by separation into two Departments. In 1949, the Master of Business Administration degree was authorized. On April 22, 1955, the Department of Business Administration, with the largest enrollment in the University at the undergraduate and master's level, became a School. *The nation's capital for the first time had a School of Business Administration.*

The absence until then of such a School is most significant in terms of the stature and importance accorded to private business enterprise at the seat of the federal government and of the lack of any strong feeling of a need for professional education in business administration among those responsible for the daily operations of our country's largest business. The drastic change created by the School is perhaps most dramatically illustrated by government employees now making up half of the School's part-time enrollment. Their understanding of how our business system actually operates will be determined to a large degree by the School's effectiveness in the classroom. The School thus serves as a *unique, non-political meeting ground for business and government that can do much to create better understanding and greater cooperation between these two major elements in our society.*

In April 1957, the School was authorized to offer the Doctor of Philosophy in Business Administration degree, thus adding to its curriculum the highest degree of academic scholarship. In January 1966, the Doctoral Association was formed to promote the highest standards of scholarship and intellectual excellence among faculty, candidates, and alumni.

Philosophy of the School The primary purpose of The American University School of Business Administration is to prepare men and women for positions of executive responsibility and for leadership in our society. Whether the career be in private business or in a non-profit institution, in education as a teacher of business or an administrator, in the military, or in an area of government calling for competence in business management, whether the career be at home or overseas, the School's programs are designed to help develop the knowledge, educational horizons, background, and skills required for eventual success in policy-making positions. The programs call for a broad base of general education, an understanding and appreciation of our private enterprise system, ability to think in terms of the business climate and overall needs and problems, familiarity with organizational principles and behavior, analytical competence, and, above all, a knowledge of the "why's."

"The man who knows how will always have his job; the man who knows why will be his boss!"

The School believes its graduates must clearly understand, appreciate, implement in their careers, and be able to explain the following principles:

- The basic measure of efficiency of the modern business unit in terms of operations and contribution to our society is its *profitability*. Without profit, no business enterprise endures or serves society. Without *profit and private enterprise*, the American achievement would have been impossible. Without economic freedom, political freedom cannot endure.
- The need to make a *profit in competition* with other firms, domestic and foreign, motivates and drives a business to higher efficiency, to expansion, to innovation, to rapid exploitation of new developments in science and technology. *Competition*, which provides rewards for success and penalties for failure, is a harsh taskmaster.
- Today, business is a profession and the business leader is a leader in our society. As such, he not only must bring knowledge, competence, and understanding to the business unit, but must also always maintain *high ethical standards* in all his activities. The future of our economy depends to a large degree on his *creative ability*, the quality of his *decisions*, and the ethical level of his *actions*. *Business management is the basic profession which provides the material foundation for all other human activities in our society.*
- The business unit must contribute to the advancement of society as well as to its own growth, by meeting *responsibilities* to employees, stockholders, and the general public, and by increasing the amount of goods and services, making them available at the lowest possible cost and *thereby increasing standards of living throughout the world.*
- *Ethics and morality, the recognition of the dignity and worth of individual human beings, are the foundations of sound and profitable business operations and satisfying personal careers.*

atives of the Curricula Education, to be meaningful and long-lasting, must be far more than the faculty's filling with large amounts of information the presumably empty minds of students. Students of business administration must develop intellectual capacity and acquire knowledge, but they must also know how to use that intellectual capacity and knowledge in solving problems. Because they are planning careers in a dynamic, ever-changing world, they must know how to differentiate between principles and precedents . . . they must be curious, flexible, imaginative, innovative. Because they are achieving results through people, they must develop competence in working with others and a high standard of personal, moral, and ethical values.

Because demands upon executives in every aspect of their activities continue to grow, demands for higher and higher performance and greater knowledge and ability by students in the School likewise continue to grow. *This "open end" is a basic characteristic of professional education and a major reason why such education calls for hard work, long hours, and rigorous discipline.*

Education means "a leading out." To be successful, it must be two-way. No matter how talented the faculty or how well-constructed the curriculum, students must also participate actively. *The primary obligation and responsibility for personal and professional development and for achieving the objectives that follow, rest, in the final analysis, with each individual student.*

This Faculty, in teaching and in design of curricula, seeks to help each student develop to professional levels his ability to:

- Think, to identify and analyze organizational problems, and to make effective decisions
- Coordinate men, machines, and materials into profit-making activity
- Analyze operations in terms of measured facts for purposes of planning and control
- Find needed information and appraise its accuracy and usefulness
- Present ideas effectively, both orally and in writing, and to utilize such ideas in formulating plans and policies
- Understand the economic, political, social, and international environment within which business operates
- Deal with agencies of government in business relationships
- Recognize the social and civic obligations of business and the businessman
- Develop his personal set of moral and ethical values
- Work effectively with people at all levels and of differing outlooks, recognizing their dignity as individuals, and their roles as members of the group.

The curricula provide the foundation *both* for immediate on-the-job success and for continued advancement to increased responsibility. They help each student develop a satisfying personal and professional philosophy. To further these objectives, the School offers each student individual counseling and stresses a close student-faculty relationship.

Business students share with liberal arts students the need for a *liberal* education. The objectives of education in business administration are the same as the objectives of liberal arts education, but they

are reached through a different subject matter—one that puts an increasingly heavy premium on analysis, integration, problem solving and decision making and, therefore, one that should be characterized by a stronger and more demanding intellectual discipline. For many students, business administration has proven a more effective tool than most other subjects for developing a sense of values and a personal philosophy. What can provide more demanding and more challenging education than the intellectual ability, knowledge, and skills required to manage an organization; the need to get results through the work of other people organized into groups, working together to achieve a common objective; effectively analyzing consumer tastes and backing that analysis with an investment of time, energy, and money; integrating and coordinating the functional departments of a business; helping subordinates grow and develop; learning how to communicate and to persuade; providing employment and making possible economic growth and a rising standard of living? Does not business administration meet the goal of liberal education by preparing its graduates more effectively than most other subjects for the world in which they are going to work and live?

The School believes there is no conflict between a liberal and a business education. It seeks to develop the skills, values, outlook, and personal philosophies associated with a true liberal, well-rounded education. It accomplishes this both by drawing on the College of Arts and Sciences for 45% of the credits required and—equally or more important—by utilizing its own courses as vehicles for reaching the same educational objectives.

Effective teaching in business administration must be “liberalizing” to be good business education and the School follows this belief in its course objectives, approach, and level of teaching. It seeks to discover and teach the principles underlying the behavior of people in varied situations. It tries to develop the student’s capacity for logic, imagination, understanding, and reasoning. It requires clear, concise, and persuasive expression of ideas, both orally and in writing.

The School’s B.S. in B.A. degree is built on the premise that business administration calls for the broadest and most liberal education if its graduates are truly to be business leaders effective in managing people and organizations.

UNDERGRADUATE PROGRAM

Since degrees are awarded for proficiency in scholarship and attainment of educational objectives, quantitative requirements of credits are *minima*. Additional requirements may be added where deemed necessary. Many students, to secure a stronger educational foundation for career success, voluntarily elect courses beyond minimum requirements.

Degrees in business administration are *professional* degrees. They assume that the goal of each student is to secure the strongest possible educational preparation for personal and professional success. Since formal education is one of the major investments and most important developmental factors of the student’s life, he should pursue his studies with the professional attitude of long and hard work, interest in all

areas of knowledge, desire to learn as much as possible in each course and always to go beyond the minimum, continuous curiosity, and alertness to current developments and their causes.

All curricula are available to part-time as well as full-time students.

Undergraduate Degrees The undergraduate curriculum builds limited professional specialization on the foundations of a broad general education. It combines courses in business and related fields with general studies in humanities, natural and social sciences, and mathematics.

University Requirements See page 28

Associate Degree in Business Administration

This is used largely by part-time students to mark somewhat better than “half-way” progress toward the Bachelor’s degree toward which all credits satisfactorily completed apply. Earning it in the minimum of 66 credits, however, involves going out of the “ideal” sequence for the Bachelor’s degree. A minimum average of “C” is required.

Limited concentrations are offered in General Business and in Accounting.

University Requirements in General Education (42 credits plus physical education)

School Requirements (24 credits)

Bachelor of Science in Business Administration

Minimum of 120 credits with at least “C” average. No grade lower than “C” meets School (Category 2) or Major (Category 3) requirements.

CATEGORY 1: General Education (required by University and School)
—54 credits

General studies in basic areas of knowledge for broad, rounded education and as foundations. Designed to strengthen basic skills, provide background of knowledge whereby students can move easily in the world of ideas, and increase appreciation of values of our society.

Composition and Reading (6)	Science-Mathematics (12)
Physical education (4 non-credit units)	Statistics (6)
Social Sciences (12)	Approved Non-Business (6)
Humanities (12)	

CATEGORY 2: School of Business Administration Core Requirements—
42 credits

Fundamental management tools, exposure to basic area of business. Common core of broad, thorough foundation for all business students.

(a) Required (24 credits):

10.306 Introductory Accounting I (3)
10.307 Introductory Accounting II (3)
10.201 Business Law I (3)
10.465 Business Finance I (3)
11.300 Marketing I (3)
10.481 Principles of Production (3)
10.456 Principles of Management (3)
10.458 Business Policy (3)

- (b) Choice of six (18 credits):
- 10.302 Business Law II (3)
 - 10.466 Business Finance II (3)
 - 11.301 Marketing II (3)
 - 10.491 Personnel and Manpower Management (3)
 - 10.500 Private Enterprise and Public Policy (3)
 - 11.526 Fundamentals of International Business (3)
 - 10.431 Fundamentals of Income Tax (3)
 - 55.410 Introduction to Data Processing (3)
 - 10.558 Ethics in Management (3)
 - 12.462 Fundamentals of Transportation and Logistics

CATEGORY 3: Major and area of concentration, 15 credits

The major, an organized series or related courses, provides limited specialized competence. This major, like a major in any other school in the University, is the student's exploration in depth and shows his ability to master an integrated curriculum. The "vertical" part of his undergraduate education, it provides an exposure very different from the many first courses from various fields that make up so much of his program.

While the major is usually selected for career preparation, the School core requirements provide an educational background for a career as a junior executive in almost any business field.

Students without clearly defined specialized interests major in General Business. All full-time students take the same courses for the first two years, at the end of which they can shift majors without loss of credits. Changing majors later than the beginning of the junior year can mean added courses.

The major must be officially selected (or confirmed) before registration for the first session of the Junior year.

This portion of the curriculum, therefore, provides a springboard to a first job and the basis for continued advancement. It does not prevent later career changes nor does it mean a narrow and limited view. The School core provides the overall viewpoint, relates specialized activities to the total pattern of operations, and builds in flexibility to meet future needs and situations.

CATEGORY 4: Electives, 9 credits

In consultation with a counselor, students choose electives from business or non-business courses. Superior students may use electives for the Integrated Bachelor's-Master's Program (see below). Many use electives for a second concentration closely related to their major, e.g., Accounting for Finance majors, Marketing for Transportation majors, etc. This both strengthens career preparation and increases career opportunities.

The Majors GENERAL BUSINESS

This major, rather than providing specialization in one area, consists of fundamental courses from basic fields. It is an "across-the-board" background for a junior executive in any kind of organization, for qualifying for management training programs of large corporations, or for strengthening qualifications for present positions and preparing for future increased responsibilities.

By using electives, students can supplement one or more areas with advanced study and increase both their depth of background and flexibility of qualifications for various kinds of careers.

ACCOUNTING

An integrated education for students preparing for the CPA examination or for careers in industrial accounting, governmental service, or related fields such as law or management. Courses provide both technical competence in accounting theory and procedures, and an understanding of the significance of accounting information and its role in operational planning and control.

Students seeking the CPA should check specific requirements of their State and discuss programs with their adviser. *The Accounting Curriculum is registered in New York State.*

AUTOMATIC DATA PROCESSING SYSTEMS

The electronic computer is the symbol of the "Information Revolution" whose impact has scarcely yet been felt. An estimated 470,000 positions will be available in 1970 to men and women professionally educated in computer programming and data processing. Demand is expected to continue far greater than supply.

FINANCE

The *Financial Management* concentration provides effective preparation for the future general manager, finance vice president, controller, treasurer, credit manager, or other executive whose responsibilities require a more intensive knowledge of and ability to utilize the institutions, procedures, and strategies of financial management.

The concentration in *Investments* contributes to competence in investing as an individual and for professional careers as financial and investment analysts, investment advisers, securities brokers, and registered representatives.

With the cooperation of the American Institute of Banking, *Commercial Banking* offers the opportunity to combine work experience with the educational resources of both organized Banking and the Finance Program.

INDUSTRIAL RELATIONS, PERSONNEL, AND MANPOWER MANAGEMENT

For any organization to function effectively, its executives must be well qualified in managing the human factors. If they fail here, they cannot achieve long term success in other objectives.

Personnel Management covers principles of recruitment, selection, training, supervision, motivation, compensation. Courses stress philosophy and rationale far more than mechanics and techniques.

Industrial Relations is concerned largely with union-management relations. Courses emphasize collective bargaining from the viewpoint of management's complex problems and in the context of total operations.

INTERNATIONAL BUSINESS

This pioneering and distinctive Program provides understanding of the international ramifications which so greatly affect business, economics, and politics. Future managers for domestic and overall operations, as well as those in international business, will find this background most valuable.

The multinational enrollment, the multinational faculty, and the

multinational institutions headquartered in Washington make possible better understanding and adaptation to international marketing, personnel, and legal conditions and to political nationalism.

MARKETING

Free marketing in a free economy is the heart of our economic system. Freedom of choice in the marketplace is the economic equivalent of free political action. The critical role of marketing in profitable operations, its significance for economic growth and ever-sharpening competition between firms and industries and between countries, and the emergence of a profession of marketing create a wide variety of challenging career opportunities for "creating" customers and thereby raising standards of living.

PRODUCTION (INDUSTRIAL) MANAGEMENT

Production functions are studied as individual and related manufacturing processes and as a total integrated operation in relation to the other major functional areas. The impact of technology on the production process is examined, evaluated, and projected. Production decision-making factors, internal and external to the firm, are emphasized.

REAL ESTATE

Demands upon real estate men and women for knowledge and competence can no longer be met by the costly trial and error of experience. Transactions are too intricate, competition too keen. University education is now as essential here as for law, medicine, or engineering.

Washington is one of the world's greatest laboratories in real estate and construction and the School offers one of the country's most complete programs. Sequences in Appraisal and Property Management are officially accepted toward professional designations. Many alumni already head their own firms. The School cannot meet present demand for graduates, for both local and national employment.

STATISTICS

Statistical methods are increasingly used in managerial decisions. This major provides competence in both the quantitative tools and in the skills and backgrounds of the general executive who is the primary consumer of statistical analyses. By speaking both "languages," the graduate increases his usefulness and, thereby, his career opportunities.

TRANSPORTATION, LOGISTICS, AND TRAFFIC MANAGEMENT

Transportation and logistics activities are basic to the successful functioning of our economy. Increasing competitiveness, rapid technological change, recognition of need for more effective marketing of services and for fuller utilization of the modern management tools have led railroads, motor carriers, and airlines, in particular, to seek men combining education in transportation with business administration and marketing management. Industries are similarly demanding traffic managers with a broad education in logistics, distribution management, and business administration.

Washington is the center of government activities relating to all modes of transportation. Resource materials for study abound and transportation agencies and carrier associations provide opportunities

for part-time employment while in school and full-time employment after graduation.

PRE-LAW

This major provides a strong base and a competitive advantage for a successful legal career. Without a basic competence in business, the modern practitioner faces serious problems. Without a knowledge of accounting, for example, it would be difficult to handle income or estate tax matters. Without a knowledge of accounting and finance, it would be difficult to prepare a registration statement for the Securities and Exchange Commission or to conduct hearings before the Federal Communications Commission, the Interstate Commerce Commission, etc. As a result, much of the highly desirable practice before government agencies is preempted by a comparatively few law firms which have developed the necessary business know-how.

The modern lawyer is called upon more and more to provide guidance for management decisions because, in today's relations between business and government, the legal channels through which the business judgment flows must often determine the action taken. In fact, many leading business executives were formerly members of law firms which had advised those companies on their intricate legal business problems.

Course Sequence Sheet A basic responsibility of each student is registering properly each session. He must meet prerequisites and requirements for degree and major, avoid conflicts of required courses, etc.

Each undergraduate receives a *Course Sequence Sheet*, an "ideal" session-by-session schedule which brings together in one place and coordinates University requirements governing all degrees, School, and major requirements. This is his major planning and scheduling tool.

Admission to the Undergraduate Program See page 24
Submit application and credentials to Director of Admissions, The American University, Washington, D. C. 20016.
Application may be made for any session—fall, spring or summer.

Advanced Standing for Members of the Bar, A.I.B. Students CPA's or members of the Bar may receive 30 credits. Up to 16 credits may be awarded for satisfactorily completed American Institute of Banking courses.

Recommended High School Background The School recommends as much English, History, Social Science, and Public Speaking as possible and three or four years of Mathematics and a Foreign Language. Extra-curricular activity in debating, writing, and on business staffs of publications and part-time and/or summer employment in business will be helpful.

Opportunities for Superior Students Recognizing that students enter with different levels of ability and varying degrees of proficiency, the University has special programs whereby *superior students* substitute advanced for basic courses and/or enter with advanced standing (if sufficient, they may earn both B.S. in B.A. and M.B.A. in the time normal for the former alone).

EARLY ADMISSION—From junior year of high school.

WAIVER EXAMINATIONS—Electives in place of basic courses.

ADVANCED PLACEMENT—Placement in advanced courses.

ADVANCED STANDING—College credit for high school courses.

For details, see page 25

Integrated Bachelor's- Increasingly, the Master's degree is prerequisite to professional positions. To facilitate superior undergraduates, an integrated course of study begins with the junior year and leads to the M.B.A. A student approved by this program may—

Master's Program

- a. Tentatively select in his junior year his elective M.B.A. Comprehensive Field and plan Major and electives accordingly.
- b. Apply toward M.B.A. credits earned satisfactorily in graduate level courses taken during senior year in excess of hours needed and not used to meet specific course requirements for B.S. in B.A. Application must be made at time student registers for such courses.
- c. Be advanced to candidacy for M.B.A. upon entering his year of graduate study, if his average is B or better in his Major.
- d. Complete all work for the M.B.A. in one year.

Superior junior college graduates admitted to the School may thus complete both B.S. in B.A. and M.B.A. in three years.

GRADUATE PROGRAM

Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult the Dean's office for the latest information.

Admission to the See pages 38 and 42

Graduate Program Application may be made for any session—fall, spring or summer. Note the Admission Test for Graduate Study in Business scores must be provided.

Students must clear admission status before registering.

Qualifications THE MASTER OF BUSINESS ADMINISTRATION

for Admission

Admission is open to holders of bachelor's degrees from accredited four-year undergraduate colleges and universities whose academic performance, professional experience, and personal qualities indicate promise of success in this program and who earn *satisfactory* scores on the Admission Test for Graduate Study in Business.* Letters of recommendation and/or evidence of professional attainment may be submitted in support of applications.

In exceptional cases, applicants not meeting these qualifications may be considered on the basis of *superior* scores on the Admission Test for Graduate Study in Business.

THE PH.D. IN BUSINESS ADMINISTRATION

Admission is based on superior academic performance and personal qualities, generally including previous completion of a Master's degree. Admission to the Ph.D. is separate from admission to a Master's degree, whether the Master's degree is from The American University or elsewhere. Applicants for the Ph.D. must earn *satisfactory* scores on the Admission Test for Graduate Study in Business (applicants who previously earned such scores need not take the Test again).

* In unusual circumstances, applicants unable to take Test before registration may be permitted to enroll. If previous academic performance is sufficiently high, they may be admitted with good standing contingent upon earning a satisfactory score within 3 months following registration. Otherwise, they should register in the College of Continuing Education until they can present a satisfactory score as part of their credentials.

The Admission Test for Graduate Study in Business Used as an admissions criterion by the leading graduate schools of business administration, the Test is offered four times a year in various locations. Registration, via application form, should be received by Educational Testing Service no later than two weeks before date of Test for examinations in U.S. and its territories or Canada. For candidates tested in other countries, registration deadline is one month before Test. The 1967 Test will be given at The American University on February 4 and July 8.

Bulletin of Information for Candidates is available from Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. The ATGSB is *not* designed to test specific knowledge in specialized academic subjects. It seeks to measure aptitude for, not knowledge of, business administration by seeing whether candidates can understand and use words and numbers and reason effectively. Normal undergraduate education should provide sufficient general knowledge to deal adequately with test questions.

Applicants for Fall should take Test in February or April; for Spring, July or November; and for Summer, February, or April.

Required Graduate Study Registration See pages 41 and 45

Continuous Study Any degree candidate, full-time or part-time, who has not completed course requirements and who has been out of attendance for two consecutive sessions (excluding Summer), must meet all degree requirements prevailing when he returns.

Transferability of Credits at Military Institutions Regionally accredited military institutions (e.g., U.S. Naval Post-Graduate School at Monterey) are treated as other regionally accredited institutions. Six graduate credits, where appropriate to student's program, may be transferred toward either M.B.A. or Ph.D. from the National War College,* Industrial College of the Armed Forces,* Army War College, Navy War College, Air War College, and Foreign Area Specialist Training Program (Soviet Union, Detachment "R" Oberammergau).

Credits may be transferred only for the full course in residence and for the three service colleges (Army, Navy, and Air), the senior course only, if a distinction is made between that course and others.

The Master of Business Administration Degree

The M.B.A. is a degree in administration for able men and women who seek success as leaders of organizational activity. It builds upon a common foundation: either an undergraduate business major or, by class performance or examination, demonstrated mastery of fundamental tools and concepts (the "prerequisite" First Year courses). By completing these First Year courses, students who did not major in business receive a thorough foundation for effective performance in advanced courses and a knowledge of the basic disciplines underlying the art and practice of management.

* 12 toward the Ph.D.

Knowledge of and skill in administration must be shown in Business Management and in an elective advanced field. Thus, the student must display mastery over two areas, each intensively, one in general administration and one in a specialized field.

Administration is thus not studied "in a vacuum," without reference to specific applications, or purely theoretically without the discipline and test of serving as a tool to accomplish organizational objectives. In Business Management, he confronts a wide variety of managerial problems as he studies administrative theories and principles. He must learn techniques of analysis, evaluation, problem-solving, and persuasive communication. By having an elective field, he adapts the curriculum to his interests and objectives. He applies his knowledge of administration to this field and graduates with limited subject matter competence in a functional or applied area as well as in general administration. (Many using the elective field for immediate career purposes take additional courses in the area.)

He acquires basic managerial tools and the habit of thinking like an executive. He has been trained to solve problems in a variety of fields and defend his solutions persuasively while, at the same time, keeping the flexibility of a mind open to the thoughts, ideas, and facts presented by others.

His ability should increase as broadened and tested by experience. He has the educational background for success in the area in which he begins his career as well as for continued and increased success in higher and higher managerial levels.

Course Requirements Two academic years of full-time study (54 credits). Length of part-time study depends upon number of courses carried per session and registration in Summers.

ADVANCED STANDING may be received for: (1) previous satisfactory completion of FIRST YEAR courses or equivalents or by passing *Waiver Examinations*; and (2) transfer from other accredited graduate schools of up to 6 credits of appropriate SECOND YEAR courses if at least "B" grades. Generally, undergraduate Business majors can complete M.B.A. in 30-36 credits.

FIRST YEAR COURSES: "Core" of 24 credits that provides, despite differing undergraduate majors, common, balanced foundation of competence in "tool" areas prerequisite to advanced study. *All First Year courses must be satisfactorily completed before advancement to candidacy.*

First year courses:

10.400 Use of Accounting Methods (3)

10.401 Legal Environment of Business (3)

69.400 Managerial Statistics (3)

10.442 (formerly 19.310) Introduction to Managerial Economics (3)

10.456 Principles of Management (3)

10.457 Quantitative Methods in Decision Making (3)

10.465 Business Finance I (3)

11.300 Marketing I (3)

SECOND YEAR courses: Minimum of 30 credits in "500" and above courses, with at least "B" average in American University courses. At

least 24 credits, including Seminars meeting non-thesis option, must be in residence.

BUSINESS MANAGEMENT: 10.642 Managerial Analysis (3); 10.656 Design of Organizations (3); 10.657 Planning—Programming—Budgeting (3); 10.756, 10.757 Seminars in Policy Formulation (6); 10.758 Seminar in Human Relations I (3).

ELECTIVE FIELD: At least 12 credits in “500” or above courses, generally including at least one Seminar.

Ten Comprehensive Examinations 10.001 Business Management and elective field from following (or special interdisciplinary field approved by Director of M.B.A. Program):

- 10.010 Accounting
- 10.030 Advertising
- 10.012 Automatic Data Processing (Computer Systems)
- 10.013 Banking and Financial Institution Management
- 10.014 Business Education
- 10.015 Business-Government Relations**
- 10.037 Business Logistics
- 10.016 Business Statistics
- 10.033 Church Management
- 10.017 Financial Management (including Business and Corporation Finance)
- 10.019 Industrial (including Personnel) Psychology
- 10.20A Industrial Relations
- 10.021 Institutional Management (including Hospital Administration)
- 10.22A Insurance, Life
- 10.22B Insurance, Property and Casualty
- 10.023 International Business
- 10.024 Investment Analysis (including Investment Banking)
- 10.036 Land Planning and Use
- 10.035 Legal Aspects of Business**
- 10.002 Managerial Analysis (Business Economics)
- 10.038 Management Information Systems
- 10.025 Marketing
- 10.026 Operations Research
- 10.20B Personnel Management In Business
- 10.018 Production (Industrial) Management
- 10.027 Public Relations in Business
- 10.034 Purchasing (including Procurement and Materials Management)
- 10.028 Real Estate
- 10.011 Research and Development Management
- 10.029 Retailing
- 10.032 Transportation (including Traffic Management)

To sit for the two Comprehensive Examinations, taken as a unit in the fall or spring semester or July, students must have satisfactorily completed all First Year prerequisite courses, been advanced to candidacy, have at least a “B” average in graduate studies, and have

** See page 250 for advanced standing for holders of the LL.B degree enrolled in the M.B.A. Program.

completed or be in the final session of completing all required course credits. Separate applications must be made for advancement to candidacy and for admission to Comprehensive Examinations. (Deadline for latter is announced in calendar of respective Fall, Spring or Summer *Schedule of Classes Bulletin*.) Applications must be approved by Assistant to the Dean, M.B.A. Program, stamped by Office of Student Accounts, and filed in office of Dean of Graduate Studies.

A candidate who fails to pass both Examinations may request permission to retake Business Management and the same or another elective Field (if adequately prepared for the latter). He may be required to take additional course work to strengthen his background. A candidate who fails twice is automatically dismissed from the Program.

Counseling General inquiries and initial and general counseling are by the Assistant to the Dean, M.B.A. Program. Counseling for preparation for Comprehensive Examinations is by appropriate Program Director or his representative. Each student develops with his counselors an M.B.A. Planning Record which provides an overall schedule and indicates progress toward completing requirements.

Advancement to Candidacy Admission to graduate study does not automatically mean advancement to candidacy for the M.B.A. degree. Each is a separate step in the student's progress toward the degree.

At advancement, approval of the elective Comprehensive Field is sought and an appropriate form filed with Assistant to the Dean, M.B.A. Program. Advanced standing for previous appropriate graduate study is officially granted at advancement.

Advancement to candidacy has *no connection with admission to the comprehensive examinations*. The candidate must apply for the latter (before the deadline dates—announced in the *Schedule of Classes Bulletin*) by filing the proper application form, and paying the required fee.

Students *may* apply for advancement to candidacy when they have completed the first 12 hours of Second Year courses (with an average of "B" or better) and have satisfactorily completed all First Year prerequisites. This application *must* be made no later than the completion of 18 hours of Second Year courses. If at this time a student's average is less than "B", he may be dismissed from the University. He may also be dismissed if the grade average falls below the minimum requirement at any time thereafter.

All requirements for the M.B.A. degree are expected to be completed within three years from the date of first enrollment in the degree program. If not completed, the student must petition for readmission if he wishes to continue. Students needing First Year prerequisite courses for the M.B.A. have the time period called for by the Statute of Limitations extended in the proportion that the prerequisite course requirements bear to graduate credit requirements.

MODEL M.B.A. SCHEDULE

(for full-time students *without* advanced standing)

SESSION I (12-15 credits)

- 10.400 Use of Accounting Methods (3)
- 69.400 Managerial Statistics (3)
- 10.442 Introduction to Managerial Economics (3)
- 10.456 Principles of Management (3)
- 10.401 Legal Environment of Business (3)

SESSION II (15 credits)

- 11.300 Marketing I (3)
- 10.457 Quantitative Methods in Decision Making (3)
- 10.465 Business Finance I (3)
- 10.401 Legal Environment of Business (3) *or*, if taken in Session I,
10.642 Managerial Analysis (3)
- Course 1 in Elective Field (3):*

SESSION III (12-15 credits)

- 10.756 Seminar in Policy Formulation I (3)
- 10.657 Planning-Programming-Budgeting (3)
- Course 2 in Elective Field (3)
- Course 3 in Elective Field (3)
- 10.642 Managerial Analysis (3) (if not completed in Session II)

NOTE: Application for Advancement to Candidacy must be made on the completion of 12-18 credits of Second Year courses.

SESSION IV (12 credits)

- 10.757 Seminar in Policy Formulation II (3)
- 10.758 Seminar in Human Relations I (3)
- 10.656 Design of Organizations (3)
- Course 4 in Elective Field (3)

NOTE: Comprehensive Examinations (offered each Fall, Spring, and Summer) may be taken this Session by very well prepared candidates. Others should take them in the next Session, utilizing the time interval for thorough preparation.

Doctor of Philosophy in Business Administration

The growth in size and complexity of the American economy, the serious challenges, national and international, to American business and American society, and the need to face new and unprecedented problems are creating rapidly increasing demands for executives and business educators whose depth of education and breadth of outlook match their expanding tasks and responsibilities. These demands, currently and for the foreseeable future, are far outrunning the supply of operating executives, staff and advisory personnel, research specialists, scholars, and educators with such qualifications. Thus, both the need and the opportunities are now greater than ever before.

* Assuming all prerequisites for that course previously completed.

The School's Ph.D. in Business Administration represents that highest level of performance in creative scholarship. It tests the candidate's critical and analytical ability together with his broad, integrated background in his specialized fields. Thus, it represents a major personal, professional, and academic attainment.

Ph.D. candidates are carefully selected and thoroughly tested at every stage of their programs. Most of those enrolled have already achieved major positions in business, government, the military, and institutions of higher education in this country and overseas.

The Ph.D. in Business Administration: (1) strengthens and broadens the professional ability of administrators; and (2), prepares candidates with the highest standards of research and scholarship for careers as professional business educators and as research and staff specialists.

It requires high level competence in Business Management, Managerial Analysis (Business Economics), and two elective Comprehensive Examination Fields. It stresses development of a philosophy of administration and a frame of reference derived from the social sciences and the quantitative approach, within which administration is understood and may be practiced. The curriculum, while building on the M.B.A. foundation, is broader and deeper.

Course and Seminar Requirements Minimum of 66 credits in graduate courses and seminars (plus 12 hours of Dissertation Seminar) with a better than "B" average.

PREREQUISITE COURSES: All FIRST YEAR M.B.A. courses. Requirements may be met by previous satisfactory completion, by passing Waiver Examinations, or by passing such courses as part of the Ph.D. Program.

TOOLS OF RESEARCH: Accounting and Statistics (unless a foreign language or mathematics is approved partially in lieu of statistics). Non-language tools may be satisfied by examination or by certification based on satisfactory completion of appropriate courses. Candidate should complete both Tools before submitting dissertation proposal and at least one before advancement.

BUSINESS MANAGEMENT:

10.656 Design of Organizations (3)

10.657 Planning-Programming-Budgeting (3)

10.756, 10.757 Seminars in Policy Formulation and Administration (6)

10.758 Seminar in Human Relations I (3)

10.761 Seminar in Philosophy of Management (3)

MANAGERIAL ANALYSIS (BUSINESS ECONOMICS):

10.642 Managerial Analysis (3)

10.742 Seminar in Managerial Analysis I (3)

DISSERTATION SEMINAR: (12).

ELECTIVE COURSES: Balance of required credits in "500" and above courses, generally including at least two Seminars. At least 54 of the 66 credits must be in fields of the Comprehensive Examinations.

(Note: All the above and other appropriate courses satisfactorily completed for the M.B.A. may be applied to the Ph.D. requirements.)

Comprehensive Examination Fields **WRITTEN COMPREHENSIVE EXAMINATIONS:**
11.001 Business Management.

11.002 Managerial Analysis (Business Economics), and two elective fields (one of which may be outside of Business Administration, with approval of Director of Doctoral Programs.)

- Elective Fields**
- 11.030 Accounting
 - 11.032 Business-Government Relations
 - 11.034 Business Finance
 - 11.036 Industrial Relations & Personnel Management
 - 11.038 International Business
 - 11.039 Land Planning and Use
 - 11.040 Marketing
 - 11.042 Production (Industrial) Management
 - 11.044 Public Relations in Business
 - 11.046 Real Estate
 - 11.048 Transportation & Physical Distribution
 - 11.050 Computer Systems
 - 11.052 Operations Research
 - 11.054 Research & Development Management
 - 11.056 Systems for Management Information
 - 11.058 Systems for Scientific & Technical Information
 - 11.065 Church Management

Note: Doctoral Candidates wishing *Ph.D. in Business Administration: Technology of Management*, select two fields from the 11.050-11.058 sequences.

Separate applications must be made for advancement and for admission to Comprehensives. Applications for latter must be signed by Assistant Dean, Ph.D. Program, stamped by Office of Student Accounts, and filed in office of Dean of Graduate Studies not later than the final dates listed in the respective Fall or Spring *Schedule of Classes Bulletin*. See also page 43.

Dissertation Requirements Successfully defend at an oral examination a dissertation approved by the Dissertation Advisory Committee as reflecting an original contribution to the established body of knowledge in the selected field.

Advancement to Candidacy Admission to a doctoral degree program does not automatically mean advancement to candidacy for a Doctor's degree. Each is a separate step, and advancement is a discretionary act; various requirements may be set up in the best judgment of the School.

The student proposes his elective comprehensive fields in filing his application for advancement to candidacy.

Doctoral degree students who have completed 30 hours of graduate work, including the Master's program if this degree has been secured, and at least 15 additional hours in residence at the University, may apply for advancement to candidacy if their grade average in all graduate work taken at the University is at least "B". Application *must* be made not later than the end of the semester in which 18 semester-hours of graduate work will have been completed in residence at the University, subsequent to admission to the doctoral program. If a student is ineligible for advancement at that time, his work at the University may be terminated. It may also be terminated if the grade average falls below the minimum requirement at any time thereafter.

If the Master's degree has been received at the University, a doctoral

degree student *may* apply for advancement to candidacy after completing 12 graduate hours beyond the Master's degree but *must* apply no later than the end of the semester in which 18 semester hours of graduate work will have been completed beyond the Master's degree.

Transfer credit for prior work taken at other institutions is usually granted at the time of advancement to candidacy. In order to be transferred, the credits earned elsewhere must be graduate level courses taken after the student received the Bachelor's degree, and they must be judged appropriate to the student's degree program.

All requirements for the Ph.D. degree are expected to be completed within five years from the date of first enrollment as a doctoral student (if the student entered with a Master's degree). If not completed, the student must petition for readmission if he wishes to continue. Students needing First Year prerequisite courses have the time period called for by the Statute of Limitations extended in the proportion that the prerequisite course requirements bear to graduate credit requirements.

SPECIAL PROGRAMS

Combined Business-Law Degrees Programs

Practicing lawyers and law schools increasingly recommend business administration and accounting as advantageous backgrounds or supplements for legal studies. The lawyer with a business or accounting background can more effectively resolve the problems of businessmen-clients, is far better qualified for such specializations as corporation or tax law, and is better equipped to move to positions of managerial responsibility.

M.B.A.-LL.B.: Work beyond the first year at accredited law schools may be given graduate credit if both relevant to a degree program and earned with at least "B" grades. University residence and specific course requirements must be fully met. Qualified graduates of the University's Washington College of Law receive advanced standing of 12 credits, toward the 30, of courses at the "500" and higher level. Graduates of other accredited law schools transfer 6 credits of "B" or better toward the 30. Both receive credit for 10.401 Legal Environment of Business. Either *Legal Aspects of Business or Business-Government Relations* serves as the elective Comprehensive Examination under this special Program.

Attorneys thus supplement legal backgrounds with a thorough education in business fundamentals (M.B.A. First Year Courses), in advanced study in Business Management (the area of administration), and in the interrelations of law and business. By building on their legal educations, they earn the M.B.A. in a shorter time and are better prepared to manage legal firms or departments, to deal with business operations and organizations at a high management level, to qualify for high managerial positions themselves, and to teach Business Law in schools of business administration.

Preparation For Careers in the Foreign Service

To meet the increasing need for Foreign Service Officers with a thorough education in business, the Junior Foreign Service Officer Examination now includes in Part 2 of the General Background test, *Option*

B: Management and Business Administration. This calls for an understanding of the more advanced concepts of executive management, business administration, foreign commerce, and international marketing.

The School recommends as effective educational preparation the B.S. in B.A. with a major in International Business and electives generally used for foreign language study. Students preferring to major in Finance, Marketing, or Industrial Relations and Personnel Management should use electives for International Business and foreign language.

The M.B.A. provides a higher-level education in executive management. International Business or other relevant fields may be used as the elective Comprehensive Examination.

Career Opportunities in the Bureau of International Commerce International Business, Marketing, and Finance, with electives selected as in the Foreign Service Officer examination (see above), are recommended for educational preparation for appointments as Business or Trade Specialists. The Bureau uses the Federal Service Entrance Examination (FSEE) to fill most initial appointments. For further information, write Bureau's Personnel Division (Washington, D. C. 20230).

Certificate Programs (In conjunction with College of Continuing Education):

EXECUTIVE CERTIFICATE PROGRAM

For mature men and women with substantial executive experience who have not had an opportunity to earn a Bachelor's degree, do not meet requirements for direct admission to M.B.A., and have not had more than 30 hours of previous college study. Application is by letter (accompanied by complete resumé of education and experience). Admission is highly selective, limited to those: (a) at least 35 years old; (b) with a minimum of five years of executive experience; (c) recommended by head of business firm or government agency or commanding officer, if in military; (d) earning satisfactory scores on Admission Test for Graduate Study in Business (see page 243); and (e) with experience equivalent to an undergraduate business major and which indicates ability to complete satisfactorily advanced study in business administration.

Executive Certificates will be awarded in areas of M.B.A. Comprehensive Fields (see page 245), where applicant completes with at least "B" average 12 hours in M.B.A. First Year prerequisites (unless waived on basis of examinations) and 12 hours in area of specialization. An applicant may receive more than one *Executive Certificate* by completing with at least "B" average an additional 6 hours of First Year or other prerequisites (unless waived by examination) and 12 hours in the additional area of specialization for each Certificate beyond the first. (Where prerequisites are waived, appropriate advanced courses may be added to earn total required number of hours. Up to six hours of basic courses in area of specialization when prerequisite to registration for advanced courses, may be substituted for M.B.A. prerequisites.) Minimum residence requirement is 18 hours.

Students may *not* be concurrently enrolled in a degree program nor is the Executive Certificate Program open to those already holding a Bachelor's degree. If a registrant later wishes to earn the B.S.B.A.

degree and is admitted, he will receive credit toward that degree for all courses satisfactorily completed in the Program.

CERTIFICATE IN ACCOUNTING

Basically for holders of Bachelor's degree in a field other than accounting, who wish to become professional accountants and qualify for the C.P.A. Examination. Appropriate courses satisfactorily completed in the undergraduate program or in previous study may be counted toward requirements, subject to minimum residence of 18 hours. (Credits taken toward undergraduate and/or graduate degrees at The American University count toward this residence requirement.) Students admitted to M.B.A. or Ph.D. in Business Administration at The American University may also receive advanced standing for appropriate courses satisfactorily completed in this program, thereby meeting a significant portion of the requirements for those degrees. Students *may* be concurrently enrolled in a degree program.

The Certificate in Accounting is awarded upon completion, with at least "C" grades, of courses in Accounting, Taxation, and Business Law prescribed by Director of the Accounting Program. Courses will be based on previous education and background and requirements of the C.P.A. Examination. In all cases, a minimum of 36 hours (including transfer credits) will be required.

CERTIFICATE IN AUTOMATIC DATA PROCESSING SYSTEMS

30 hours, of which at least 18 must be in residence. Business students select either 10.481 Principles of Production (3) or 10.491 Personnel and Manpower Management (3); see Check List for details. *May* be taken concurrently with degree program.

PROFESSIONAL CERTIFICATE IN CHURCH MANAGEMENT

Awarded on completion of the following program of intensive study, related work experience, and applied research. Classes are scheduled to permit studies at a high level of scholastic achievement without extensive leave from regular duties. Graduates of this program are members of The American University Alumni Association.

Two patterns of learning experiences, the "Prerequisite Studies" and the "Concentration Area," 36 to 48 semester-hour credits, are required of all candidates for the Certificate.

The Prerequisite Studies require completion of 30 credits with a cumulative average of at least "C". This minimum must include six credits in composition and reading, six in religion, and three in each of the following: general psychology, introduction to sociology, introductory accounting, principles of management, and personal finance. Additional credits needed to meet the minimum of 30 may be in courses of the student's choice.

The Concentration Area requires completion of six to eighteen credits with a cumulative average of at least "B". Candidates are expected to achieve considerable knowledge and skill in church management and to indicate significant professional competence in this field, as demonstrated by:

1. Superior scholarship in completing either three credits or an approved 36-hour Institute in each of *at least four* of six functional areas

of major emphasis in church management (program development, monetary resources, physical facilities, office services, staff personnel, program promotion);

2. Satisfactory performance in a six-credit internship (Courses 12.552 and 12.553) in which, among other accomplishments, a significant practical research project is completed and reported as if for publication; and

3. Passing a general examination, written and oral, designed to assist in evaluating depth and extensiveness of knowledge in the candidate's choice of *any four* of the preceding six areas of major emphasis.

Completion of the Prerequisite Studies must precede advancement to candidacy for the Certificate. All or most of this requirement may be met by transfer of credits from other accredited institutions or by passing waiver examinations.

Business Administration degree candidates at American University receive full credit for appropriate courses satisfactorily completed in this Certificate program. Students may work concurrently toward both degree and Certificate.

CERTIFICATE IN REAL ESTATE

Growing complexities of operations and strong pressures for raising standards of practice to professional levels place an ever increasing premium upon additional formal education for practitioners. The Certificate Program goes beyond the taking of individual courses. It provides an integrated "package" which attests to successful completion of an educational foundation for professional competence.

Part I: Business Administration Courses

10.400 Use of Accounting Methods (3)*

10.442 Introduction to Managerial Economics (3)**

10.465 Business Finance I (3)

10.491 Personnel and Manpower Management (3)

11.300 Marketing I (3)

Part II: Real Estate, Construction Management, and Land Planning Courses

11.584 Mortgage Banking (3); either 11.476 Introduction to Real Estate Investment (3) or 31.504 Institute on Real Estate Appraisal I (3); either 11.576 Real Estate Transactions (3) or 11.578 Real Estate Law (3); and four other real estate courses.

CERTIFICATE IN RESEARCH AND DEVELOPMENT MANAGEMENT

The School of Business Administration and the School of Government and Public Administration, through their joint Center for Technology and Administration, are currently developing a *Certificate in R & D Management*.

Transfer of Credits Subject to at least 21 credits taken in residence, transfer credit may be granted for equivalent courses previously completed satisfactorily at other accredited institutions.

* Students without bachelor's degree substitute 10.306 Introductory Accounting I (3) and 10.307 Introductory Accounting II (3).

** Students without bachelor's degree substitute 19.100 Introduction to Economics I (3) and 19.101 Introduction to Economics II (3).

All courses satisfactorily completed in this Certificate Program may be applied to degree requirements for students admitted to degree status. Students may work concurrently toward a degree and the Certificate, provided at least 6 credits are used exclusively for the Certificate requirements.

Internships Because effective education for business leadership requires experience as well as academic study, the School encourages full-time students with better than average grades to participate in part-time employment. This can generally be arranged through the University Placement Office.

Regardless of future career plans, part-time selling experience is particularly recommended. As a step in professional growth, the student is expected to confront a prospective buyer with an offer of goods and services, to create a market situation in which goods and services are moved for profit.

Leading Washington firms provide paid work internships; this experience enables the business graduate to approach prospective employers with both classroom study and work "know-how." This combination has been a major factor in the unusual record of success of the School's graduates. Special Graduate Internships are available in both the Transportation and Real Estate Programs. The School also has a Scholarship-Internship Program with Kay Jewelry Stores.

Institutes The School periodically offers specialized professional Institutes, primarily for practicing businessmen. Planned with leading practitioners and, generally, appropriate trade and professional associations, they are part of the School's "Continuing Education" and offer short, intensive instruction on a time schedule permitting leave from regular duties. They are an important means of strengthening professional qualifications and of counteracting executive "obsolescence." See *Institutes* under course listings.

CENTERS

Center for International Business American private enterprise has a great and growing stake in the world economy. Even the most sheltered American businesses are no longer immune to world conditions. Business urgently needs to strengthen its competence to meet new opportunities and responsibilities and to develop and support means for greater participation of private enterprise in overseas international development and economic aid programs.

Recognizing the sharply increasing, urgent need for research and education in this field, the University through the School of Business Administration has established a *Center for International Business* to provide the necessary background for: (1) Americans seeking careers at home and/or abroad, in the growing number of firms seeking foreign business; in the Foreign Service; and in other governmental and international agencies where public services are closely associated with business abroad; and (2) students from other countries seeking proficiency in business with emphasis on educational preparation for developing business operations for foreign or domestic firms in their own countries and for their governments. Advanced programs are also being planned for those already in international business who wish to strengthen backgrounds and increase competence in this complex area.

International Business Research Laboratory A unique facility for research established by a grant from the late Mrs. Alan M. Scaife, the *International Business Research Laboratory* comprises business documents and artifacts organized to answer practical business questions, with information made readily available by modern data-handling technology. Equipment and information are being contributed by individual donors, firms, and governments. Additional contributions are welcomed to increase the scope and usefulness of the Laboratory.

American and foreign company executives and government officials as well as students are welcome to utilize the Laboratory.

Center For Technology and Administration The Center for Technology and Administration, established in the School of Government and Public Administration in 1958, now administers curricula and research in *The Technology of Management* for both Schools.

Center For Transportation and Logistics Research Increased need for and growing recognition of the value of research led the School to establish a *Center for Transportation and Logistics Research* which conducts research projects on a contract basis in transportation, traffic management, physical distribution, and business logistics.

The Center seeks additional funds for research scholarships for graduate students and a reference service for visiting scholars. Foundations and individuals impressed by the many unique advantages arising from the School's leadership and pioneering in Transportation education and the abundant and largely unexploited research resources of the nation's capital have made possible establishment of the Center.

Center for Church Management An extensive program of education for leadership in obtaining and using monetary, physical, and human resources for churches and related non-profit organizations is conducted by the *Center for Church Management*. The American University is the nation's only institution of higher education with a comprehensive program of professional development in this field.

The distinctive purpose of the Center for Church Management is to educate men and women for practical applications of religious stewardship. Accordingly, its objectives are:

- to help both clergy and laity become better stewards of church management responsibilities,
- to make available an educational basis for strengthening the role of pastors as chief administrators, and
- to provide advanced professional education for career service in church management.

Four basic convictions or major premises guide the development, operation, and promotion of the Center's programs:

FIRST, if churches are to accomplish their distinctive purposes, their approaches to management must be at least as effective as those of other organizations in today's complex society.

SECOND, some of the principles and processes of management that are used successfully in business, industry, education, and government may be used similarly in churches.

THIRD, since churches are service-rendering rather than profit-making,

and because of the uniqueness of their purposes and objectives, some of their approaches to management must be different from those of commercial enterprises.

FOURTH, the differences between the application of management principles to the purposes and objectives of secular organizations and the application of management principles to the peculiar needs of churches should be clearly identified and thoroughly understood.

Courses of instruction offer (1) basic information and guidance for pastors and laymen seeking practical assistance in performing church administrative functions, and (2) continuing education for in-service growth of professional directors and ministers of management. Objectives are pursued through the media of credit courses, non-credit institutes, faculty-supervised internships, field studies, professional consultation, and publication services.

Admission is available to members of all religious faiths and denominations and to both non-degree and degree students.

Degree and certificate programs are provided for qualified candidates. Church Management is an advanced field of concentration and Comprehensive Examination for the Master of Business Administration degree, the Ph.D. in Business Administration, and, where approved, for other graduate degrees. The Professional Certificate in Church Management is awarded to those who complete a specified program.*

Wesley Theological Seminary students may take church management courses as a part of their degree programs, without additional cost, subject to approval of the student's faculty adviser and the Director, Center for Church Management.

NATHAN A. BAILY ANNUAL LECTURE IN CHURCH MANAGEMENT

Another innovation in its field, this lectureship was launched in November 1966. Started by an initial gift from James E. McKinney, business manager of the Arlington, Va., Methodist Church, it, at Mr. McKinney's request, was established in the name of and in honor of Dean Nathan A. Baily. The Lectures as delivered, or in expanded form, are to be published by arrangement with the Center for Church Management.

The Inter-Personal Laboratory

In this pioneering self-teaching program, students teach themselves to make valid inferences about people by reviewing information and then making forecasts which are confirmed or rejected by the "feedback" or programming. Hence, the student learns from his own errors and thereby progressively comes to understand the vital role of feedback in human communication and organizational life.

Washington Conference on Business-Government Relations

This Annual Conference brings together in the audience and on the rostrum key executives from business and government to help determine jointly the responsibilities of the public and private sectors in maximizing their contributions to a healthy economy. It provides a unique, non-political forum for business to tell its story; for business executives to discuss problems with government officials and to acquaint government people with how business actually operates; for government to explore with business its concepts of regulation and its

* See Page 252 for the *Certificate in Church Management*.

appropriate activities. The Conference makes possible a two-way "Dialogue," a common meeting ground for free and constructive discussion and analysis to help our business system better serve not only the special interests of the producer, distributor, and consumer, but also the general interest of all the people and of the nation.

The 1968 Conference will be held on April 1-2. For program and further details, write Director, Washington Conference on Business-Government Relations, The American University, Washington, D.C. 20016.

THE AMERICAN UNIVERSITY LECTURES IN BUSINESS-GOVERNMENT RELATIONS

Made possible through a grant from the Hill and Knowlton Company, they present outstanding government leaders, business executives, and academic scholars. These lectures explore the main problem areas in business-government relations and offer guidance in improving them. The lectures are published in book form.

The 1967 lecturers were Secretary of Commerce John T. Connor; Dean Courtney C. Brown of the Graduate School of Business, Columbia University; and Elisha B. Gray II, Chairman of the Board, Whirlpool Corp.

SCHOLARSHIPS AND LOANS

University Undergraduate Scholarships See page 17 for information, credentials, final application dates. *School of Business Administration students may apply for both University and School scholarships; they are not restricted to the latter.*

Transfer Student Eligibility Transfer students other than junior college graduates are not eligible for scholarships during their first year, but are eligible for consideration the second year if their academic records meet required standards.

School of Business Administration Graduate Scholarships KAY JEWELRY STORES SCHOLARSHIPS: 5 Scholarships of \$1,000 plus possibility of paid employment. Open to full-time juniors, seniors, and graduate students. If qualified, holders will receive junior executive or executive position offer upon graduation.

CHEVY CHASE (MD.) CENTER MERCHANTS ASSOCIATION SCHOLARSHIPS: Annual \$400 scholarships for men or women. Retailing or Marketing majors preferred.

HODGDON, HAIGHT & CO. FINANCE SCHOLARSHIP: up to \$1,000. For full-time seniors or graduate students planning careers in securities or real estate finance. Preference to retired military personnel. When feasible, holder will also receive paid internship or part-time employment with Hodgdon, Haight & Co., Inc., Stockbrokers.

NATIONAL ASSOCIATION OF HOME BUILDERS FOUNDATION SCHOLARSHIPS Scholarships and research assistance of up to \$1,000 for students in the School preparing for careers in real estate or home building.

MORTON J. LUCHS AND FRANK J. LUCHS SCHOLARSHIPS: Frank J. Luchs, while Executive Vice-President and Treasurer of Shannon & Luchs, Realtors, established a \$700 a year scholarship in memory of his father,

a pioneer leader in Washington real estate. After his own untimely death, friends contributed funds to be used as a supplementary or separate scholarship.

Full-time juniors, seniors or graduate students may apply. Holders may, when feasible, intern at Shannon & Luchs.

EBNER R. DUNCAN MEMORIAL SCHOLARSHIP OF THE NORTHERN VIRGINIA BOARD OF REALTORS: \$500 per year for two years. For full-time junior, senior, or graduate Real Estate student residing in Northern Virginia.

DENICE MORTGAGE BANKING SCHOLARSHIP AWARD: Anthony G. Denice, President of A. G. Denice, Inc., Mortgage Bankers, has established this Annual Award for the student completing Mortgage Banking who is judged the most worthy recipient by the School. The winner will also, if feasible, intern with the firm.

EDWARD J. KYLE SCHOLARSHIPS: Each fall, District-Realty Title Insurance Company gives in memory of the late Mr. Kyle—a leader in the Washington Real Estate Community—a scholarship covering tuition for one Real Estate course to the outstanding student in 11.577 Brokerage Administration. In spring, a similar scholarship is given to the outstanding student in 11.576 Real Estate Transactions. Full-time and part-time, undergraduate and graduate, degree and non-degree students are eligible.

FEDERAL GOVERNMENT ACCOUNTANTS ASSOCIATION SCHOLARSHIP: \$500 scholarship to an outstanding full-time student of Accounting in one of the accredited metropolitan Washington universities. Selection based on academic performance, campus and community activities, personal qualifications.

D.C. INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS (AND WOMEN'S AUXILIARY) SCHOLARSHIP: \$200 for outstanding full-time undergraduate Accounting major who has completed at least his sophomore year.

WOMEN'S ACCOUNTING SOCIETY, D. C. CHAPTER, SCHOLARSHIP: \$100 for outstanding woman Accounting student, graduate or undergraduate, full-time or part-time.

BURKE, LANDSBERG, & GERBER SCHOLARSHIP: \$250 for senior majoring in Accounting. May also include, when feasible, part-time internship with firm.

CREDIT MANAGEMENT ASSOCIATION OF GREATER WASHINGTON MEMORIAL SCHOLARSHIP: \$250. Preference to employees of member firms and to students preparing for careers in credit management, finance, or business administration.

JACOB A. KAMEROW SCHOLARSHIP: \$200 for outstanding student, graduate or undergraduate, full-time or part-time, in memory of late Jacob A. Kamerow, a leader in insurance, civic, and religious activities.

NORTHERN VIRGINIA HOUSEHOLD GOODS CARRIERS ASSOCIATION: \$500 for major in Transportation and Logistics.

COUNCIL OF CHURCHES OF GREATER WASHINGTON SCHOLARSHIPS: Several "entrance" scholarships, each covering half tuition for courses in church management, "to help needy and worthy persons obtain an educational basis for becoming better stewards of church management

responsibilities." Awarded each session on interfaith and international bases to (1) theological seminary students, (2) pastors and lay officers of mission churches, and (3) young-clergy staff of larger congregations. May include, when feasible, part-time paid internship with the Council. Graduate or undergraduate, full-time or part-time, degree or non-degree students are eligible.

CLYDE W. HUMPHREY SCHOLARSHIPS: Established by the Church Management Chapter of The American University Alumni Association in honor of the founder and director of the Center for Church Management. Half-tuition scholarships offered each session to degree or non-degree students, full-time or part-time, graduate or undergraduate.

WESLEY MEN'S BIBLE CLASS SCHOLARSHIPS: Awards cover half tuition for one or more courses in church management. Funds are provided by the Wesley Men's Bible Class of Clarendon Methodist Church in Arlington, Virginia. Available each session on interfaith and international bases "to (1) theological seminary students, and (2) young pastors wishing basic information and guidance in systematic approaches to church administrative functions." Open to full-time or part-time, undergraduate or graduate, degree or non-degree students.

University Graduate Fellowships and Scholarships See page 36 for information, credentials, final application dates. Since consideration depends on prior admission, application as much in advance of official deadlines as possible is recommended.

School of Business Administration Graduate Fellowships and Scholarships In addition to *University Awards*, School of Business Administration students have available:

WHIRLPOOL FELLOWSHIPS IN BUSINESS-GOVERNMENT RELATIONS, two at \$4,500. Established by Whirlpool Corporation, Benton Harbor, Michigan.

ROBERT V. FLETCHER AND SOUTHERN RAILROAD FELLOWSHIPS IN TRANSPORTATION, at \$2,000 plus tuition for four courses per session—for assisting in conduct of School's Transportation Institutes and other appropriate duties.

ACCOUNTING, MARKETING, INTERNATIONAL BUSINESS FELLOWSHIPS, at \$2,000 each plus tuition for four courses per session—appropriate duties.

GRADUATE ADMINISTRATIVE ASSISTANT, at \$2,000 plus tuition for four courses per session. Open to students in any field of Business Administration.

AARON AND CECILE GOLDMAN FOUNDATION FELLOWSHIP, \$1,000 for a superior Howard University graduate studying full-time for M.B.A.

ROBERT E. WILSON MEMORIAL SCHOLARSHIP: In memory of late distinguished business and government executive and member of School's Business Advisory Board. \$500 to outstanding A.U.M.B.A. going on to School's Ph.D. in Business Administration.

Graduate students are also eligible for Kay Jewelry Scholarships, Chevy Chase Merchants Association, Hodgdon, Northern Virginia Board of Realtors, National Association of Home Builders, Luchs, Denice, Woman's Accounting Society, Kamerow, Credit Management

Association, Northern Virginia Household Goods Carriers Association, and Church Management Scholarships described under Undergraduate Scholarships.

Doctoral candidates may also apply for Fellowships from organizations such as the Ford Foundation, Richard D. Irwin Foundation, American Bankers Association (Harold Stonier Fellowship), and American Accounting Association.

Graduate Internships The Transportation and Logistics and Real Estate Programs have developed paid Graduate Internships which provide valuable research experience to supplement classroom study.

Resident Counselorships Provide room and board to both men and women graduate students. Apply to Dean of Students no later than March 1.

Loan Programs For University Loans, National Defense Education Act Loans, Methodist Student, and other University-wide Funds, see page 17.

The Anna Mary Mann* Memorial Loan Fund provides loans for women students, with preference to those in the School of Business Administration and the School of International Service.

To meet emergencies which cannot be handled through University Loan Funds, a special School of Business Administration Student Loan Fund has been established in honor of *William M. and Rebecca Sachs*.

Thanks to the *Sachs Loan Fund*, the School also participates in the *United Student Aid Program*. This national nonprofit loan program permits full-time undergraduate students who have completed satisfactorily the freshman year to borrow up to \$1,000 per year and graduate students up to \$2,000 per year. No student may borrow more than \$4,000. Interest is 6% simple. Payments of interest and principal begin the fifth month after graduation and may be anticipated. In case of drop-outs, payments begin at once.

Already enrolled students need endorsement by Assistant to the Dean, MBA Program, or Assistant Dean, Undergraduate or Ph.D. Program, for consideration by the Director of Financial Aid. Entering students awarded Graduate Fellowships need endorsement of Program Director or other School officer recommending appointment of the Fellow.

The Director of Financial Aid officially recommends the loan, after consultation with the student, and the loan is negotiated at the student's home town bank on the student's own signature.

Subject to total lending capacity, therefore, no qualified student need be deprived of the opportunity to earn his degree in the School.

- Send applications for *University Awards* to Director of Financial Aid for Undergraduate Scholarships or to Assistant Dean for Administration, School of Business Administration, for Graduate Fellowships and Scholarships. Separate brochures describe each category.

- Applications for *School of Business Administration Awards* should be sent to Assistant Dean for Administration, School of Business Administration.

- All School Awards may be supplemented by limited loans.

- As long as funds remain available, Fellowships and Scholarships may be renewed on the basis of successful academic performance.

* B.S. in Business Administration, 1959.

ACADEMIC REGULATIONS

See also pages 18 and 23

Fulfillment of Academic Requirements The student's primary obligation is to pursue conscientiously his academic objective and to complete as effectively as possible his academic assignments.

Professional education calls for long hours of hard work, mastery of subject matter, and ability to use it in specific situations; disciplined, inquiring, and observing minds; and independent research and analysis. Studies must therefore receive the highest priority of time and effort—they represent probably the most important personal and professional investment the student can make.

Students must supplement class work by doing considerable outside reading, written assignments, and study. Each student must carefully schedule his time so as to draw maximum profit from each course as well as from the curriculum as an integrated whole. To pursue a special interest or ability in one or a few courses at the cost of only minimum outside work in others will reduce the benefits of a carefully coordinated program and weaken the student's educational foundation and career preparation. Further, while extracurricular activities and part-time employment have many educational benefits for business students, they must remain secondary to academic studies.

Meeting Degree Requirements While a large portion of faculty time is devoted to assisting the student to make proper program and career choices, the function of counselors is to help individuals help themselves. Selection of a major and choice of courses are among the most important decisions that each student makes during his university career. They cannot properly be delegated to anyone else. EACH STUDENT IS HELD RESPONSIBLE FOR THE PLANNING AND PURSUIT OF HIS EDUCATIONAL PROGRAM AND FOR MEETING DEGREE REQUIREMENTS. It is his responsibility to understand fully, and to comply with, all University and School regulations. Course sequence sheets for undergraduates and M.B.A. Planning Records are indispensable tools for doing this effectively.

Absences Students are expected to practice the business principle that regular and punctual attendance at all classes is a primary obligation and that absences shall be only those absolutely necessary. They must still be justified to instructors with the student still responsible, even if excused, for making up and mastering work he missed.

Veterans and other students studying at government expense are subject to the loss of educational benefits for excessive absences.

Use of Correct English A student whose written or spoken English in any course is unsatisfactory may be assigned supplementary work, without academic credit, or required to enroll for additional English courses.

Academic Dismissal Undergraduates must maintain a 1.00 cumulative index (C average). Each academic record is evaluated at the end of each year of full-time study (or equivalent for part-time study). Those who at any time, however, do not meet minimum grade requirements may be dismissed at the School's discretion.

Graduate students must maintain a minimum 2.00 cumulative index (B average). Those who complete 18 graduate credits without the required index, or who drop below at any time thereafter, may be dismissed.

Students whose averages fall below good standing have the responsibility of taking the initiative in discussing their problems with faculty advisers, the Office of Testing and Guidance, and instructors. They will generally find it desirable to reduce their course load to permit more intensive concentration.

Once dismissed, undergraduates must wait a year before they can apply for Re-Admission.

Students already enrolled in Summer Session at the University will generally be given until the end of the Session before official action is taken.

Academic Probation A freshman who fails to achieve a 1.00 index (C average) during his first two semesters (24-30 credit hours), but whose cumulative index is .750 or above, may be placed on academic probation for his second year at the discretion of the Assistant Dean, Undergraduate Program.

Freshmen should repeat any failed courses in the next semester. See page 21.

Honors

Dean's Honor List Undergraduates carrying a session schedule of 15 or more credits are placed on the Dean's Honor List for each session in which they earn an average of 2.5 (B+) or better. They are also guests of the School Faculty at a luncheon given each session to honor their achievement.

Honors Awards Each year, faculty and students join to honor students being recognized for excellence in studies and in campus activities. The President of the University generally presides at this Honors Convocation.

The School makes Awards at this Honors Convocation and at its Annual School Dinner, including:

MORRIS CAFRITZ MEMORIAL AWARD—to the student in first place on the Dean's Honor List for the preceding Spring Session.

JEROME W. ROWE MEMORIAL AWARD—to the student in first place on the Dean's Honor List for the preceding Fall Session.

JOSEPH I. JOLLES MEMORIAL AWARD—to student making outstanding contribution to Real Estate Program

C. C. GLOVER S.A.M. LEADERSHIP AWARD—to President of The American University student chapter of the Society for Advancement of Management

WALL STREET JOURNAL STUDENT ACHIEVEMENT AWARD—to outstanding Finance student

D. C. INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS AWARD—to student receiving the scholarship awarded by this organization

D. C. CHAPTER, WOMEN'S ACCOUNTING SOCIETY, AWARD—to student receiving the scholarship awarded by this organization

ERNEST CONNOLLY MEMORIAL AWARD, Washington Personnel Association—to outstanding student in Personnel Management

MARKETING STUDENT OF THE YEAR AWARD—to senior outstanding in scholarship and service to the Marketing Program

MELPAR, INC. AWARD—annual prize of \$100 for best paper on some aspect of use of computers for administrative purposes. All students in Technology of Management courses eligible.

STAFFORD H. CASSELL MEMORIAL AWARD—to the undergraduate best combining athletic and scholarship achievement. In memory of the late Vice-President of the University and long-term faculty member.

ANNUAL STUDENT ACHIEVEMENT AWARD OF WASHINGTON CHAPTER OF SOCIETY FOR ADVANCEMENT OF MANAGEMENT—to outstanding full-time senior majoring in a management field.

Honors Study The School is currently developing an Honors Program for the Junior and Senior Years for superior undergraduates.

Through the Lillian and Stanley I. Posner Foundation, the *Stanley I. Posner Memorial Award* of \$200 is made to the graduating senior in the School with the highest overall academic average.

Master of Business Administration The M.B.A. is conferred *cum laude* for a graduate course index in residence of 2.7 or higher and at least two “Distinction” grades on Comprehensive Examination; *magna cum laude* for 2.8 or higher and at least three “Distinctions”; and *summa cum laude* for 2.9 or higher and four “Distinctions” (3.00 = A).

STUDENT ACTIVITIES

The extra-curricular program serves to enrich the student's experience—developing qualities of leadership and responsibility, strengthening ability to work with others, and encouraging growth of lasting friendships. Thus, student activities supplement the School's curriculum by providing working laboratories for preparing for careers in organizations. Just as business utilizes participation in professional and civic activities for developing younger executives as well as for rendering valuable service, so the business student can use the opportunities provided and help himself and his School simultaneously.

SOCIETY FOR ADVANCEMENT OF MANAGEMENT. Programs include round-table discussions, field trips, talks by business leaders, dinner meetings with the Washington Senior Chapter, concentrating on management and administration. Two active sub-committees: Investment Committee which manages an actual portfolio of securities (the “Nathan A. Baily Investment Training Fund”), and Advertising and Public Relations Committee.

STUDENT MARKETING CLUB. Affiliated with the American Marketing Association. Members work closely with the Marketing Faculty on various projects to strengthen knowledge and experience in marketing.

PI SIGMA EPSILON. National professional Fraternity of Marketing educators; Sales executives; University students. Goals are a collegiate brotherhood of men interested in advancement of marketing and sales

as a professional career: to promote improved methods and attitudes toward marketing and sales; to encourage University programs preparing men for careers in marketing; and to instill in members the highest professional and ethical standards.

RHO EPSILON. National Real Estate Fraternity. Includes students, alumni, faculty, and distinguished real estate executives. Active program of professional and social events.

ACCOUNTING CLUB. Brings Accounting Majors into contact with leading representatives of public accounting; through guest speakers, studies accounting functions, problems, and career opportunities of various business enterprises and governmental agencies.

PRE-LAW CLUB. Assists students planning legal careers to select most suitable law school and provides through guest speakers information on legal careers and qualifications for successful practice. Membership open to all students in University.

A.I.E.S.E.C. Initials of title used by founding French students (Association Internationale des Etudiants en Sciences Economiques et Commerciales). Arranges exchange of vacation and postgraduate short-term employment so life in other countries may be experienced through actual jobs. All interested students eligible and welcome to participate.

DELTA NU ALPHA. Chapter 193 of this national Transportation fraternity provides many professional opportunities for Transportation majors to strengthen their backgrounds and develop ties with successful practitioners.

Area Professional Associations Many national professional and business associations have Washington area chapters. Students are welcome to attend their meetings and participate in other program activities. Washington is also the scene of numerous conventions whose programs are of great educational value to business students who are regularly invited to be present.

Student Leadership Training Program The purpose of this program, offered through the Office of Student Personnel, is two-fold: one is to provide an opportunity for students to discuss the practical problems of leadership as they relate to groups in which they hold membership; the other is to develop an educational program which includes an understanding of the philosophy of leadership as well as the development of specific skills in leadership techniques.

The School hopes that each student will participate in the extra-curricular program during his college career, to the extent practical in terms of his time and ability and with his understanding that *the highest priority must always be given to his studies and to his academic objectives and responsibilities.*

Business School Club When the School of Business Administration was established in April, 1955, a group of seniors decided to form the A.U. Business School Club. They joined with graduate students and alumni of the business programs to support in every way possible the growth and advancement of the new School. Meetings were held monthly in Washington.

The Business School Club functions as both a part of and a supple-

ment to the University Alumni Association. It builds alumni loyalty and support through recognition of the particular and specialized interests of those who have studied in Business Administration programs. Members are encouraged to participate in all alumni activities.

COURSES OF INSTRUCTION

Prerequisites Many courses call for a previous minimum background of knowledge, as indicated by courses cited in individual descriptions as *prerequisites*. Titles are those of The American University courses; equivalent courses satisfactorily completed at other accredited institutions also meet prerequisite requirements.

Administrative officers may sometimes waive prerequisites on the basis of experience and professional achievement. Where done, the student should secure the syllabus of the prerequisite course and complete the readings on his own. This will minimize the problem of gaps and out-of-date information.

Prerequisites mean the instructor will not use class time to go back and teach the material of the preliminary courses. Students are held responsible for entering the class already possessing the competence called for. *Thus, prerequisites warn students of the knowledge they are to bring with them in order to meet the expected standards of performance. Failure to possess this background can endanger the student's good standing and his ability to continue in the School.*

Accounting

10.306 Introductory Accounting I (3)

10.307 Introductory Accounting II (3)

Basic principles underlying concepts. Nature of assets, equities; fundamentals of business income measurement. Preparation of financial statements. Introduction to significance, uses, limitations of accounting data for management and investor decisions. Appraisal of accounting, reporting practices.

Prerequisite: 10.306 is prerequisite for 10.307.

10.314 Intermediate Accounting (3)

Review of fundamentals. Principles of asset and equity valuation; measurement of business income. Prevailing concepts and practices underlying financial statements. Financial reports and disclosure.

Prerequisite: 10.307 or permission.

10.315 Advanced Accounting (3)

Partnership accounting. Business reorganizations. Business combinations through pooling and purchase. Consolidated financial reporting. Estates, trusts, and other fiduciary accounting.

Prerequisite: 10.314 or permission.

10.400 Use of Accounting Methods (3)

Fundamentals, with concentration on uses of accounting as a tool of management. Not open to undergraduate business majors. Required of candidates for M.B.A. or Ph.D. who do not have adequate accounting background.

10.411 Cost Accounting (3)

Basic concepts and techniques. Responsibility accounting and performance measurement. Standard costs and flexible budgets as a management tool. Cost analysis for management planning and control, special decisions.

Prerequisite: 10.307 or 10.400.

- 10.421 Auditing (3)**
Audit objectives. Framework of auditing standards. Development of basic auditing procedures, techniques. Nature and function of audit working papers. Tests and sampling in the auditing process.
Prerequisite: 10.314 or permission.
- 10.431 Fundamentals of Income Tax (3)**
Introduction to federal taxation relating to individuals, partnerships, and corporations. Practice preparation of tax returns. Tax planning.
Prerequisite: 10.307 or permission.
- 10.512 Advanced Cost Accounting (3)**
Special topics. Advanced work in technical problems of manufacturing costs. Current developments in cost analysis, planning, control. Cost data and statistical applications.
Prerequisite: 10.411.
- 10.514 Accounting: Readings and Problems I (3)**
- 10.515 Accounting: Readings and Problems II (3)**
Structure of accounting theory. Nature of accounting principles and postulates. Consideration of major problems of income measurement and their effect on asset and equity valuation.
Prerequisite: 10.315; 10.514 is prerequisite for 10.515.
- 10.522 Advanced Auditing (3)**
Special topics. Complex problems of professional ethics, legal responsibilities. Statistical sampling. Impact of ADPS. Management Services. Influence of Securities and Exchange Commission.
Prerequisite: 10.421.
- 10.532 Advanced Income Taxes (3)**
Advanced aspects of particular interest to accountants, lawyers. Special problems of federal income taxes, including estates, trusts, corporate and partnership liquidations, distributions, reorganizations, special transactions. Federal gift, estate taxes.
Prerequisite: 10.431 or permission.
- 10.533 Tax Planning and Procedures (3)**
Minimizing impact of taxes. Control of tax burden. Research of tax problems. Tax practice and procedures.
Prerequisite: 10.431 and 10.532 (latter may be taken concurrently).
- 31.008 Basic Tax Planning in Real Estate (No Credit)**
See Institutes.
- 31.009 Advanced Tax Planning in Real Estate (No Credit)**
See Institutes.
- 10.534 Systems Design and Installation (3)**
Techniques of analyzing, designing accounting systems for effective managerial control. Adapting accounting procedures to organizations of various types and sizes. Demonstration of important machine methods.
Prerequisite: 10.411.
- 10.536 Governmental Accounting and Regulation (3)**
Fund accounting as applied to governmental and quasi-public units. Regulatory accounting prescribed by governmental agencies.
Prerequisite: 10.307 or permission.
- 10.538 Advanced Accounting Problems (4)**
Readings. Practice in solutions of advanced problems of type appearing in practice section of Uniform CPA Examination.
Prerequisites: 10.411 and 10.515.

10.539 Controllorship in Business (3)

Controller's functions. Emphasis on interpretation of accounting aspects of managerial problems, reporting. Role as staff member of management team.
Prerequisites: 10.314, 10.411.

10.540 ADPS and Accounting (3)

Integration of accounting systems and modern machines. Impact of automatic data processing on functions, responsibilities of accountant. Effects on accounting operations, managerial decisions. Accounting safeguards. Field trips.

Prerequisite: 10.534.

10.565 Financial Statement Analysis (3)

See Finance.

10.711 Seminar in Accounting Theory (3)

Development of accounting theory. Analysis of current accounting problems. Review of current literature. Required of M.B.A. and Ph.D. candidates taking Accounting Comprehensive Examination.

Prerequisite: permission.

Automatic Data Processing

See "Technology of Management" which begins on page 295.

Business-Government Relations

10.500 Private Enterprise and Public Policy (formerly Business-Government Relations) (3)

How government sets framework for the economy and conduct of business. What management should know of government control, regulation, promotion of business. Areas of cooperation and conflict. Development of and trends in business-government relations.

10.700 The Business Administrator and Government Policy (3)

Seminar using case problems to examine working relationships between business administrators and government (local, state, federal). Guest business, government leaders participate.

Prerequisite: 10.500 or permission.

10.701 Seminar in Corporate Public Affairs (3)

Role of corporate public affairs department in advising management of political trends and issues affecting the firm, industry, private enterprise, general political and social structure.

Prerequisite: 10.500.

10.703 Seminar in Business Law (3)

See Business Law.

10.705 Seminar in Business-Government Relations (3)

The philosophy of business-government relations with emphasis on research and in-depth analysis of issues and concepts.

Prerequisite: 10.500 or permission.

11.504 Government and Marketing (3)

See Marketing.

Business Law

10.201 Business Law I (3)

Legal concepts and functions. Federal, state court systems. Legal phraseology;

elementary legal bibliography. Elements of law of contracts and agency useful to business executives.

10.302 Business Law II (3)

Functions, form, content of commercial paper. Uniform Negotiable Instruments Act. Elementary law of partnerships, corporations, trusts.

Prerequisite: 10.201.

10.303 Business Law III (3)

Principles of bailments. Law of sales, sales contracts. Elements of law of personal, real property.

Prerequisite: 10.201.

10.401 Legal Environment of Business (3)

Development of law; contracts; negotiable instruments; types of organizations; real, personal property. *Prerequisite course for graduate business administration students who did not previously study Business Law or pass waiver examinations. Not open to undergraduates.*

10.703 Seminar in Business Law (3)

Analysis of business problems arising from recent legal developments, particularly in connection with new Uniform Commercial Code.

Prerequisite: 6 credits of Law and permission.

Business Management

10.456 Principles of Management (3)

Theories of management. Managerial functions: planning, organizing, coordinating, motivating, controlling. Budgeting. Decision-making; communication; human relations.

10.457 Quantitative Methods in Decision Making (3)

Appreciation, basic understanding of quantitative methods, tools that managers may use for improved decision-making. Range, applicability, integration within overall organizational framework.

Prerequisites: 10.456, 69.400, 10.442.

10.458 Business Policy (3)

Integration of principles and concepts previously studied in individual courses. Analysis, definition, proposed resolution of business problems from managerial viewpoint. Case problem method, seminar approach.

Prerequisite: senior standing.

10.556 Business Budgeting and Executive Control (3)

Budgeting as a managerial tool for analysis, planning, organizing, coordinating, motivating, controlling. Development of budgeting.

Prerequisites: 10.307, 69.300.

10.557 Administrative Communication (3)

Fundamentals of: (1) organizational communication, including organizing of channels, systems, patterns, and (2) interpersonal communication, as developed by general semantics and the behavioral sciences.

10.558 Ethics in Management (3)

Ethical problems confronting administrators. Criteria, approaches to developing values, philosophy, ethical principles. Role of religious and spiritual factors. Applications to current organizational, administrative situations through case problems. *Open only to seniors, graduate students.*

10.559 Literature of Business Administration (3)

Reading and analysis of major contributions to philosophy, methodology,

understanding of management, human relations, and other basic areas. Group analysis, seminar type discussion.

Prerequisite: permission of instructor.

10.656 Design of Organizations (3)

Developing structures that effectively organize all resources necessary to achieve organizational objectives. Analysis from viewpoint of authority, response, communication systems, compensation, technology, management patterns. Heavy emphasis on behavioral sciences contribution.

Prerequisite: Satisfactory completion of all M.B.A. First Year courses or equivalents.

10.657 Planning—Programming—Budgeting (3)

Conceptual foundations of management controls as expressed in quantitative terms. Establishing long, short term objectives. Planning process: formulating, controlling, evaluating, modifying. Benefit-cost analysis. Budget, other managerial tools used to evaluate performance in both dollar and non-dollar terms.

Prerequisite: Satisfactory completion of all M.B.A. First Year courses or equivalents.

10.756 Seminar in Policy Formulation and Administration I (3)

Development of executive skills through seminar approach, case problem method. Emphasis on competence in effective analysis of organizational problems, formulation of appropriate managerial policies. *Required of M.B.A. and Ph.D. Candidates.*

Prerequisites: At least "B" average in previous graduate studies, 10.456, and, for part-time M.B.A.'s, Advancement to Candidacy.

10.757 Seminar in Policy Formulation and Administration II (3)

Continuation of 10.756. Development, through seminar approach and case problem method, of executive skills. *Required of M.B.A. and Ph.D. Candidates.*

Prerequisite: 10.756 and at least "B" average in previous graduate studies.

10.758 Seminar in Human Relations I (3)

Development, through seminar approach and case problem method, of capacity to work effectively with superiors, equals, subordinates. Importance of human relations in successful business operations. *Required of M.B.A. and Ph.D. Candidates.*

Prerequisites: 10.456, 10.491 desirable background.

10.759 Seminar in Human Relations II (3)

Continuation of 10.758.

Prerequisite: 10.758.

10.760 Seminar for Case Conference Leaders (3)

How to conduct effective conferences, seminars by case problem method.

Prerequisite: At least 6 hours of case problem seminars.

10.761 Seminar in Philosophy of Management (3)

Fundamental concepts of management: analysis of interrelations, relation to administrative process. Development of organizational, individual philosophy. *Required of Ph.D. Candidates.*

Prerequisites: 10.756, 10.757, 10.578.

10.762 Seminar in Corporate Planning (3)

Nature, structure of planning. Development, coordination of financial, manpower, marketing, technical planning. Profitability planning. Short-term, long-term planning. Planning and forecasting.

Prerequisites: 10.656, 10.657, 10.757.

Church Management

12.545 Church Program Development (3)

Basic concepts of management and their application in designing unified programs of action to accomplish congregational purposes, objectives, goals. Fact-finding, problem identification, forecasting, policy-making, planning.

12.546 Church Financial Management I (3)

Systematic approaches to obtaining and using monetary resources for related non-profit organizations. Stewardship applied through budgeting, fund raising, purchasing, accounting.

Prerequisites: 10.467 and 12.545, or permission.

12.547 Church Financial Management II (3)

Specific preparation for further effectiveness as finance secretaries, bookkeepers, administrative assistants, business managers. Acquisition and management of long-term funds; managerial accounting; systematic purchasing; periodic reporting.

Prerequisites: 10.306 and 12.546, or permission.

12.548 Church Property Management (3)

Using, maintaining, protecting, acquiring real estate and equipment for religious purposes. Legal considerations; tax responsibilities. For pastors, property managers, and others responsible for physical facilities.

12.549 Church Office Management (3)

Functional approach to office planning and staffing, housing and equipping, communicating and scheduling, recording and reporting. Case problems to develop and integrate administrative skills.

12.550 Church Personnel Management (3)

Responsible stewardship of human resources. Determining and describing staff positions; enlisting, assigning, and training staff personnel, both volunteers and employees; developing and maintaining staff morale.

12.551 Church Management Laboratory (2)

Observations, field studies, shared experiences in exploring significant subject areas not covered adequately in other courses. Varying themes announced each session. For Spring 1968, Systematic Purchasing; for Summer 1968, Family Finance, *also* Estate Planning.

12.552 Church Management Internship I (3)

Correlation of faculty-supervised work experience and seminar sessions, to apply previous studies, develop comprehensive philosophy. Practical research, evaluation, reports.

Prerequisite: Six credits in Church Management or permission.

12.553 Church Management Internship II (3)

Scheduled field-work assignments and seminar sessions, primarily for students preparing for career service in churches and related non-profit organizations. An applied research project is completed and reported as if for publication.

Prerequisite: 12.552 or permission.

12.554 Church Program Promotion (3)

Management strategy that churches and related non-profit organizations may use effectively in seeking acceptance of and identification with their purposes, objectives, goals, accomplishments, potentialities, needs.

* Wesley Theological Seminary students may take church management courses for residence credit toward their degree programs, without additional cost, subject to approval of the student's faculty adviser and the Director, Center for Church Management.

12.746 Seminar in Church Management (3)

Advanced problems for graduate students pursuing research studies or preparing for Comprehensive Examination in this field.

Prerequisite: permission.

For those who cannot attend the foregoing courses on a complete session basis, the Center for Church Management offers a series of non-credit Institutes the subject matter of which is substantially equivalent to that of 12.545, 12.546, 12.548, 12.549, 12.550, and 12.554. For further details, see *Institutes*, page 383.

See also Catalog of Wesley Theological Seminary for graduate courses related to Church Management.

Finance

BASIC COURSES

10.465 Business Finance I (3)

How businesses acquire and manage short-term funds. Nature, use of financial instruments. Lending institutions. Money markets. Business short-term financial problems. Government assistance to small business.

Prerequisites: 10.307 or 10.400 and 19.101 or 10.442.

10.466 Business Finance II (3)

Acquisition and management of long-term funds by business firms. Investment institutions as sources of funds. The capital markets. Business long-term financial problems. Government regulations.

Prerequisites: 10.307 or 10.400 and 19.101 or 10.442.

10.467 Personal Finance (3)

Attaining personal investment goals by effective money management. Increasing value of income: budgeting, efficient saving, low cost borrowing. Providing for retirement, old age, sickness. Introduction to investments, insurance, taxes.

10.565 Financial Statement Analysis (3)

Appraisal of prevailing techniques of statement analysis. Significance of "generally accepted accounting principles". Development of meaningful analytic methods from viewpoint of financial management.

Prerequisites: 10.465, 10.466.

COMMERCIAL BANKING *

10.571 Commercial Banking Policies (3)

Factors determining management policies, services offered of individual commercial banks. Internal: capital resources, market development, profitability of functions, relations to other banks. External: government regulation, economic conditions. For present and prospective bank officers.

Prerequisite: 19.306 or permission.

10.567 Funds Management (3)

See below.

10.771 Seminar in Commercial Bank Management (3)

Analysis of current managerial problems from viewpoint of chief executive officers. Effect on individual banks of changing economic, competitive, political, regulatory policies, proposals, actions.

Prerequisite: 10.571 or permission.

* Candidates for B.S. in Business Administration may receive up to 16 credits of advanced standing for studies satisfactorily completed at the American Institute of Banking. For evaluation, submit AIB transcript to Director, Finance Program.

FINANCIAL MANAGEMENT

10.566 Financial Management (3)

Case problem analysis to develop skills in diagnosis and solution of wide range of financial problems and in financial decision-making. Interrelations of financial, functional, general management.

Prerequisites: 10.465 and either 10.466 or permission.

10.567 Funds Management (3)

Financial managers' use of money market for acquisition of short-term financial requirements, short-term investment of retained earnings and seasonal excess funds. Money market institutions, instruments from view-point of users.

Prerequisites: 10.465, 10.466.

10.765 Seminar in Financial Management (3)

Examination in depth of current issues, newly developed tools. Review of literature to cover total area of Business Finance. *Required of students electing Financial Management Comprehensive Examination.*

Prerequisites: 10.566, 10.567.

10.539 Controllership in Business (3)

See Accounting.

INVESTMENT ANALYSIS **

10.569 Investment Analysis (3)

Selecting securities. Timing: Dow Theory, dollar averaging, formula planning. Market fluctuations: measurement, analysis. Information sources.

Prerequisite: Basic understanding of securities from experience or from 10.466 or 10.467.

10.570 Advanced Investment Analysis (3)

Securities analysis. Investment approaches, theories. Portfolio construction, management. Current trends. Practical techniques for successful investment.

Prerequisite: 10.569.

10.769 Seminar in Investments (3)

Consideration on seminar basis of current problems and trends as indicated by developments in both academic and popular literature. Selected case problems. Required of students electing Investment Analysis Comprehensive Examination.

Prerequisite: 10.570.

Students may secure experience in portfolio management by being accepted to membership on the Investment Committee of S.A.M. The Committee administers the "Nathan A. Baily Investment Training Fund" which was contributed to S.A.M. in honor of Dean Baily and in order to provide such actual experience to supplement courses in Investments (see page 263).

Industrial Relations, Personnel, and Manpower Management

10.491 Personnel and Manpower Management (3)

Manpower management in corporate enterprises. Integrating organizational goals and individual needs. Recruiting, selecting, developing, compensating people at all levels of the organization.

** 10.565, 10.569, 10.570, 10.769 provide excellent background for *Chartered Financial Analyst Examination*.

- 10.591 Manpower Appraisal and Motivation (3)**
Measurement of human needs and resources. Evaluation of manpower's contribution as a basis for non-financial and financial motivation. Determining a fair day's work and pay.
- 10.592 Industrial Relations (3)**
Development of manpower in the union-management context. History of union organization, practices, legislation. Collective agreements as a basis for union-management cooperation and a foundation of corporate unity.
- 10.593 Advanced Industrial Relations (3)**
Methods by which management and unions negotiate and administer collective agreements. Mock bargaining sessions. Alleviating industrial unrest and increased effectiveness in manpower utilization.
Prerequisite: 10.592 or equivalent experience.
- 10.594 Selection of Personnel (3)**
Objectives of recruiting, selecting, appraising managers, engineers, other persons in industrial jobs. Methods of appraising suitability and potential. Use of Behavioral Science principles in making decisions about individual careers.
- 10.595 Training and Education in Industry (3)**
Designing, administering, evaluating training and educational programs in industry. Programed instruction. Executive development programs. Cost-reimbursement plans. Evaluation of results.
- 57.526 Industrial Psychology (3)**
Introduction to such technical problems as personnel selection, interviewing, morale, supervision, management; human relations in industry; basic human factors involved in design and operation of man-machine systems.
Prerequisite: 69.202.
- 10.791 Seminar in Personnel and Manpower Management (3)**
Philosophy of management from standpoint of improving and utilizing to maximum human resources of a corporation. Integrating course involving student research and seminar discussion of behavioral research findings and corporate manpower development policies.
- 10.792 Seminar in Industrial Relations (3)**
Discussion and analysis of current problems, trends in labor-management relations, new concepts in collective bargaining. Numerous student papers required. *Required of students electing Industrial Relations Comprehensive.*
Prerequisite: 10.592.
- 10.793 Seminar in International Manpower Management (3)**
Manpower problems of developing nations, particularly as faced by multinational firms. Private and public sectors. Contributions of culture, government, education, private industry, unions.
See also courses offered by Psychology.

International Business

- 11.526 Fundamentals of International Business (3)**
Types, patterns of operations. Foreign trade policies. American markets for foreign commodities. Foreign markets for American products. Channels of international marketing. International advertising, sales promotion.
Prerequisite: 11.300.
- 11.527 Export-Import Management (3)**
Buying and selling in foreign trade. Export-Import shipments. Freight forwarders. International arbitration. Financing, credits, collections. Insurance. Packing. Tariff procedures and documents. Airshipments. Communications.
Prerequisite: 11.526.

11.528 International Marketing Operations (3)

Business, marketing objectives of U. S. firms abroad. Techniques implementing objectives. Market analysis. Marketing intelligence and information sources. Economic cultural, organizational, government factors affecting overseas marketing operations.

Prerequisite: 11.526 or permission.

11.529 World Business Conditions: Problems and Opportunities (3)

The subject matter of this course changes each session to concentrate on a different major area of the world. Opportunities for local and international firms in specific countries, grouped by language and/or geography. Analysis of purchases, employment, capital formation, cooperation with foreign businesses. Contribution of private enterprise to industrial development.

Prerequisite: 11.528 or permission.

11.626 The Multi-National Firm (3)

Comparative analysis of firms with foreign subsidiaries. Organizing, controlling, managing subsidiaries; relations with governments, customers. Role in economic development, balance of payments, international relations.

Prerequisite: 11.526 or permission.

10.793 Seminar in International Manpower Management (3)

See Industrial Relations, Personnel, and Manpower Management.

11.726 Seminar in International Business (3)

Growth of native and international businesses throughout the world. Trends, policies, problems. Interaction with national economies, political conditions.

Prerequisite: 11.626.

31.025 Annual Ocean Shipping and Foreign Trade Management Institute (No Credit) *See Institutes.*

See also Transportation courses on page 282; International Economics and Economic Geography courses offered by Economics; International Relations courses offered by International Service.

Managerial Analysis (Business Economics)

10.442 Introduction to Managerial Economics (3) (formerly 19.310)

First year economics in one semester. Emphasis on areas most useful to business executives. The economy; its indicators, measures, fluctuations. The firm; economic tools for decision making. For M.B.A. and Ph.D. candidates entering without economics.

10.542 Foundations of Business Forecasting (3)

Tools needed by executives to evaluate appraisals of economic outlook in decision-making. Business cycles; fluctuations of income and employment; economic and business indicators.

Prerequisite: 10.442.

10.642 Managerial Analysis (3)

Integration of economic, organizational, motivational, legal, ethical, other managerial aspects in solving national and international business problems. Profits; output; pricing; capital expansion; planning; control. Required of M.B.A. and Ph.D. Candidates.

Prerequisites: 10.400, 69.400, 10.442, 10.456.

10.742 Seminar in Managerial Analysis I (3)

Development of decision-making skills through analytical case studies. Oral and written reports, discussion, research. Required of Ph.D. Candidates.

Prerequisites: 10.642 and completion of Statistics tool of research or Mathematics through Calculus.

10.743 Seminar in Managerial Analysis II (3)

Continuation of 10.742.

Prerequisite: 10.742.

Marketing

GENERAL MARKETING

11.300 Marketing I (3)

Fundamentals involved in marketing process: functions, institutions, channels for distribution of goods and services. Role of marketing in accomplishing business, social objectives. Readings supplemented by case analysis.

Prerequisite: 19.100 or 10.442.

11.301 Marketing II (3)

Interpreting markets, customer motivation, market behavior. Selling, advertising promotion. Pricing and quantitative aspects. Control of marketing effort. Government and marketing. Productivity and efficiency. Marketing challenges of future.

Prerequisite: 11.300.

11.401 Marketing Communications (3)

Problem approach to planning, writing communications essential in marketing products, services. Sales letters, manuals, brochures, bulletins, reports, articles for trade publications.

11.402 Salesmanship (3)

Art of salesmanship: creation of consumer desires, aiding customers in buying. Buying motives; selling techniques; characteristics of efficient salesmen. Selling in a dynamic economy.

11.411 Principles of Advertising (3)

Advertising approach to marketing problems. Advantages, limitations of advertising. Elements of advertising campaigns; budget, product, consumer studies, media selection, copy, layout, production, scheduling, testing.

Prerequisite: 11.300 or advertising experience.

11.436 Retailing Management (3)

Basic principles, techniques of merchandising, store operation. Planning, organizing, controlling operations. Buying, pricing, promoting. Accounting procedures, expense management. Managerial approach through cases.

Prerequisite: 11.301 or permission.

11.501 Consumer Markets (3)

Consumer income, expenditure, savings. How consumers exercise economic sovereignty. Competition by industries, retailers for consumer dollar. *Recommended for marketing, retailing, real estate, economics, sociology students.*

Prerequisites: 19.101 or 10.442, 69.202 or 69.400, 11.301 or 11.300 and graduate standing.

11.502 Marketing Research (3)

Information collection, interpretation, presentation for shaping marketing objectives, policies, planning. Methodology; analytic techniques; sources of data.

Prerequisites: 69.202 or 69.400.

11.583 Real Estate Market Analysis (3)

See Real Estate.

11.504 Government and Marketing (3)

Influence of federal government on marketing decision-making. Effects of government purchases on private activity. Marketing information, services of government. Regulation. Impact on private enterprise.

Prerequisite: 11.300 or permission.

12.565 Physical Distribution Management (3)

See Transportation.

11.601 Marketing Management (3)

Factors affecting marketing management decisions. Demand analysis, buyer behavior, forecasting; competitive analysis; distribution structure, locational patterns; cost analysis; optimizing. Planning Marketing Programs. Determining product, channel, price, promotion policies.

Prerequisite: permission.

11.701 Seminar in Marketing (3)

Case problems to develop overall approach to marketing function, understanding of marketing from viewpoint of chief executive. Emphasis on integration, interrelationships with other business functions. *Required of students electing Marketing Comprehensive Examination.*

Prerequisite: at least 6 graduate credits in Marketing.

ADVERTISING

11.511 Sales Promotion (3)

Methods, devices to increase demand created by merchandising, mass advertising, personal selling. Emphasis on techniques aiding development of individual selling abilities.

Prerequisite: 11.411.

11.512 Advertising Copy (3)

How to write advertisements which increase sales. Distinctive problems of various types of copy analyzed, methods of copy testing evaluated.

Prerequisite: 11.411.

11.513 Advertising Layout and Production (3)

Arrangement of headlines, copy, illustrations to achieve balance, gaze motion, distinctiveness, legibility. Type, paper, production processes. Practice in visualizing, laying out, scheduling, producing.

Prerequisite: 11.512 or permission.

11.520 Advertising Management (3)

Planning, implementation, evaluation of advertising programs from managerial viewpoint. Objectives, themes, media, measurement, evaluation, budgets advertiser-agency relations, integration into marketing plan.

Prerequisite: 11.300.

See also courses offered by Journalism and Public Relations, Psychology, and Sociology.

FOOD MARKETING *

11.546 Food Merchandising (3)

Buying procedures; market operations; costs; profit margins. Sales planning; pricing; advertising; sales promotion. Relations with suppliers. Having right items at the right time.

11.548 Food Store Management (3)

Administration of food stores. Supervision, development of personnel. Expense control. Customer services. Ordering, receiving, storing, displays, marketing. Housekeeping, safety. Record keeping, reports. Community relations.

INTERNATIONAL MARKETING

See International Business.

* Full-time male juniors planning careers in food marketing may apply for Giant Food Store Scholarship-Internships for their senior year.

RETAILING

11.536 Store Management and Merchandising (3)

Policy making. Merchandising. General administrative course; students analyze operations of actual store from viewpoint of obtaining maximum profit.

11.537 Store Organization and Operation (3)

Problems of store management faced by operating executives: organization, location, layout, expense, personnel, receiving, packing, wrapping, delivery; customer complaints; protection, maintenance; mail, telephone orders.

11.538 Fashion Retailing (3)

Fashion in selection, promotion, selling of merchandise. Effect on consumers, manufacturers, retailers. Fashion cycles. Current fashions. Career opportunities for men, women.

11.540 Retail Buying (3)

The buyer: functions and responsibilities. Pre-buying preparation; selecting new lines; ordering. Resident buying. Buying and merchandising. Problems in buying various types of goods.

11.736 Seminar in Retailing Management (3)

Problems of retail enterprises analyzed through case studies. Students attempt to develop managerial programs or bases for managerial decisions. Oral and written reports.

SALES MANAGEMENT

11.551 Sales Management (3)

Organization of sales department. Qualifications, duties of sales manager. Recruitment, selection, training. Sales campaigns. Sales, cost control.

Prerequisite: 11.301 or permission.

11.552 Distribution Cost Analysis (3)

Marketing data as management tools to reduce distribution costs, increase selling efficiency. Analyzing distribution costs, profits by products, customers, territories.

Prerequisite: 11.502.

Production (Industrial) Management

10.481 Principles of Production (3)

Organization, operation of industrial enterprises. Economics of production. Organization, management of physical plant.

Prerequisites: 10.307 or 10.400, 19.101 or 10.442.

10.581 Work Analysis (3)

Analysis of work methods, motion economy, individual's capacity for work. Measuring efficiency; fair day's work; job standardization, work measurement. Practical problems. Laboratory sessions.

10.582 Value Management (3)

Use of Value Engineering/Value Analysis as a management tool. Planned methodology and stimulated creativity to increase effectively profit potential by scientifically reducing costs.

10.583 Production and Material Control (3)

Objectives, application, organization of production control. Coordination with sales, manufacturing forecasts. Inventory control. Materials handling: selecting equipment, cost elements, training programs.

Prerequisite: 10.481 or equivalent experience.

69.570 Quality Control (3)

See Statistics.

12.565 Physical Distribution Management (3)

See Transportation.

57.526 Industrial Psychology (3)

See Psychology.

10.781 Seminar in Production Management (3)

Case problem seminar to develop skill in understanding and ability to deal with problems involved in management of industrial enterprises. *Required of students electing Production Management Comprehensive Examination.*
Prerequisite: at least 6 graduate credits in Production Management.

PURCHASING

11.503 Purchasing Management (3)

Contribution to efficient operations. Policies, procedures, organization. Special reference to industrial goods by manufacturers, institutional purchasers. Recommended for marketing, sales management, production, general management students.

11.703 Seminar in Purchasing and Materials Management (3)

Advanced analysis of problems in purchasing, procurement, materials management. Coordination of production planning, inventory control, purchasing. Application of integrated data processing. Case discussion, supervised research,

12.565 Physical Distribution Management (3)

See Transportation.

Public Relations

The School of Business Administration offers the graduate Comprehensive Examination in *Public Relations in Business* (10.27—M.B.A., 11.44—Ph.D.) so that students wishing to study Public Relations within the framework of business administration may earn the Master of Business Administration or Ph.D. in Business Administration degree. Courses are offered by the Department of Journalism, Public Relations and Broadcasting which is working with the School on a closer integration of this joint offering.

Competence in business management is increasingly demanded in terms of both the administration of public relations activities and the effective practice of public relations in business. A corporate Director of Public Relations or a Public Relations consultant to business should be able to "speak the language of business and the business executive." He is expected to understand the functions, needs, and problems both of top management and of functional executives. His business qualifications can, therefore, play an important role in his ability to develop a successful Public Relations program.

The degree in Business Administration offers the opportunity to combine both the professional specialization in Public Relations and the professional education in business administration. See the section on Journalism, Public Relations and Broadcasting for course descriptions of the following courses:

17.540 Principles of Public Relations (3)

17.541 Publicity Writing (3)

17.542 Promotional Campaigns (3)

17.543 Public Relations Overseas (3)

17.545 Public Relations in Business (3)

17.740 Seminar in Public Relations (3)

17.760 Seminar in Media Research (3)

Construction Management, and Insurance*

Real Estate, Land Planning,

(Offered with the cooperation of the Washington Board of Realtors, the Montgomery County Board., the Prince George's County Board, and the Northern Virginia Board. The latter Boards have joined the Washington Board in establishing and maintaining a Chair of Real Estate in the School.)

REAL ESTATE

11.476 Introduction to Real Estate Investment (3)

Principles, strategy of real estate investment. Risk, risk analysis. Market, market analysis. City growth and structure. Location and property analysis. Mortgage markets. Foundation course, particularly valuable for those wishing background for investing in property.

11.576 Real Estate Transactions (3)

(Formerly Real Estate Practice I.) Principles, practices of listing, selling, title transfer. Drawing documents. Contracts, deeds, financing, other instruments. Ownership rights, liens, taxes, assessments, other claims on real property.

11.577 Brokerage Administration (3)

(Formerly Real Estate Practice II.) Management of businesses specializing in brokerage and related areas. Planning and organizing. Specialization and departmentalization. Staffing. Sales management. Profit planning and control. *Prerequisite:* 11.476 or 11.576 or 11.481 or graduate standing.

11.578 Real Estate Law (3)

Legal aspects of real estate transactions for non-lawyers. Requirements in acquisition, encumbrance, transfer. Rights and obligations of parties. Survey of law, analysis of cases.

Prerequisite: 11.476 or 11.576 or 11.481 or graduate standing.

11.581 Property Management I (3)

Property management as a professional branch of real estate operations. Management of commercial, residential property. Establishing rental values, neighborhood analysis, tenant selection, leasing, tenant and owner relationships. *Final examination may be substituted for regular course examination for Course No. 1 of The Institute of Real Estate Management.*

11.582 Property Management II (3)

Advanced analysis of multi-unit apartments, office buildings, shopping centers. Legal, tax, financing aspects. Importance of regional analysis and urban redevelopment. Creative management. Internal operations. *Final examination may be substituted for regular course examination for Course No. 2 of The Institute of Real Estate Management.*

Prerequisite: 11.481 or graduate standing.

11.584 Mortgage Banking (3)

Financing methods, mortgage lending. Sources of funds, mortgage and capital markets, federal agencies. Mortgage banking, direct lending. Offered with cooperation of Mortgage Bankers Association of Metropolitan Washington. *Prerequisite:* 11.476 or 11.576 or 11.578 or graduate standing.

31.504 Institute on Real Estate Appraisal I (3)

Official study course No. 1 of The American Institute of Real Estate Appraisers. Nature of real estate value; principles, mathematics of real estate appraising. Satisfactory grade accepted by Appraisal Institute in lieu of Required Examination No. 1.

Prerequisite: satisfactory completion of two real estate courses; or at least two

years equivalent experience and permission of Program Director; or graduate standing.

31.505 Institute on Real Estate Appraisal II (3)

Case study Course II of The American Institute of Real Estate Appraisers. Urban properties; appraising procedures, capitalization techniques, case studies, problems. Credit applicable toward membership in Institute.

Prerequisite: 31.504, or passing AIREA Examination I.

11.776 Seminar in Real Estate Administration (3)

Integrating case problem seminar to provide educational background for effective administration of varied activities of real estate firms. Required of students electing Real Estate Comprehensive Examination.

31.008 Basic Tax Planning in Real Estate (No Credit)

See Institutes.

31.009 Advanced Tax Planning in Real Estate (No Credit)

See Institutes.

LAND PLANNING

11.583 Real Estate Market Analysis (3)

Analysis of real estate demand and supply in a local market. Sources of information. Population analysis, analysis of changing city and housing markets. Forecasting.

Prerequisite: 11.476 or graduate standing.

11.585 Land Planning and Use (3)

Land values and utilization. Location problems of consumers, businesses, industries, households. Changes in land use patterns produced by market forces and public policies.

Prerequisite: 11.476, or graduate standing.

11.778 Seminar in Land Planning and Use (3)

Land planning and use from interdisciplinary point of view. Roles of land economics, governmental planning, and the private sector in urban development. Urban renewal, new towns. Metropolitan problem.

Recommended background: 11.585.

12.572 Urban Transportation (3)

See Transportation.

CONSTRUCTION MANAGEMENT

11.579 Home Building (3)

Site selection, architect's responsibilities. Design, building codes, zoning. Construction materials. Landscaping. Cost, financing. Selection of builder, building contracts.

11.580 Apartment Construction (3)

Multi-family housing. Site selection, land planning, economic analysis, zoning ordinances, building codes. Design materials, construction methods, management. Relations to community growth, development. Trends, innovations.

11.779 Seminar in Construction and Housing (3)

The construction industry, with emphasis on residential construction. Changes in capital, managerial requirements; marketing policies; economic, regulatory, technological framework. Productivity, cost problems. Role in economy, issues for national policies.

INSURANCE

11.486 Fundamentals of Insurance (3)

For non-specialists in insurance. Most effective means of protecting individuals and firms against insurable risks. Kinds of risks, analysis of contracts, comparison of costs.

11.586 Life Insurance I (3)

Fundamental principles. Analysis of companies, contracts, costs to policyholders. Premium computation, valuation, apportionment of surplus. State regulations, laws, judicial decisions. *Course preparatory for Part A of the Chartered Life Underwriter's examination.*

11.587 Life Insurance II (3)

Fundamentals applied to estate planning, group insurance. Methods of computing mortality tables, premium, reserves. History of life insurance; its role in U.S. economic development. *Course preparatory for Part A of the Chartered Life Underwriter's examination.*

11.588 Property Insurance (3)

Insurance coverage of losses due to fire; the fire insurance contract; insurable interest; endorsements. Business interruption; multiple line and all risk coverage. Rates; reserves; reinsurance; loss adjustments. *Background for Chartered Property and Casualty Underwriter examination. Recognized by State of Maryland for insurance license. 11.589 and 11.591 must also be completed satisfactorily for the examination.*

11.589 Casualty Insurance (3)

Hazards underlying and protection provided by workmen's compensation, liability, automobile, aviation, accident and health, theft, boiler, machinery insurance. Rate making; regulations. Prospecting; selling. *Background for Chartered Property and Casualty Underwriter examination. Recognized by State of Maryland for license. 11.588 and 11.591 must also be completed satisfactorily for the examination.*

11.591 Automobile Insurance (3)

Nature of family auto policy; other auto policies. Financial responsibility; functions of auto insurers. *Recognized by State of Maryland for insurance license. 11.588 and 11.589 must also be completed satisfactorily for the examination.*

11.788 Seminar in Casualty and Property Insurance (3)

Integrating seminar. Emphasis on impact of underwriting changes on business operations. Research, analysis of selected topics. *Required of students electing Casualty and Property Insurance Comprehensive Examination. Prerequisites: 11.588, 11.589.*

Research and Development Management

See "Technology of Management" which begins on page 289.

Statistics

The Department of Mathematics and Statistics cooperates with the School both by offering service courses and by providing advanced courses for undergraduates pursuing the B.S. in Business Administration with a major in Statistics as well as graduate students electing Business Statistics as a Comprehensive Examination field. For description, see the College of Arts and Sciences course listings.

Technology of Management

(Joint: School of Government and Public Administration and School of Business Administration)

The general designator of The Technology of Management is used to comprehend a broad spectrum of the systems characteristic of contemporary, and future, information and managerial methods and institutions.

For complete description of programs and courses in Computer Systems, Management Information Systems, Operations Research, Research and De-

THESIS AND DISSERTATION SEMINAR

12.797 Master's Thesis Seminar (3)

12.799 Doctoral Dissertation Seminar (3)

Transportation, Logistics, and Traffic Management

12.462 Fundamentals of Transportation and Logistics (3)

Study of spatial relations in business; economics of transportation service and pricing; user v. carrier views; location theory and practice; geography of market structures; business logistics concept and function.

Prerequisite: 19.101 or 10.442.

12.562 Principles of Transportation (3)

Relation of transportation to economic, political, and social organization and to national development; economic theory applied to transportation; regulation and problems of national policy.

Prerequisite: 12.462 or graduate standing.

12.563 International Transportation Problems (3)

Structure, functions, operation of carriers engaged in overseas air and ocean transportation. Rates, services, regulation, governmental policies.

Prerequisite: 11.526 or 12.462 or permission of instructor.

12.565 Physical Distribution Management (3)

Physical distribution of products from assembly line to consignee; plant location theory; case studies relating to transportation, materials handling, inventory control, and warehousing in distribution systems.

Prerequisites: 12.462 or graduate standing, and 10.481 (latter may be taken concurrently).

12.566 Physical Distribution and Traffic Management (3)

Management procedures; factors determining rates; rate structures and tariffs classification; routing of traffic carrier's liability; claims. Case studies in distribution and traffic management.

Prerequisite: 12.565.

12.568 Interstate Commerce Law and Commission Practice (3)

Rules of procedure before regulatory bodies; rules of law; decisions of special interest in traffic administration; practitioner's code of ethics; due process preparation of cases.

Prerequisite: 12.562 or 12.566 or traffic management experience.

12.571 Trends and Problems in Transportation (3)

Principal issues and problems facing carriers of various modes of transportation in traffic, operation, regulation.

Prerequisite: 12.462 and senior or graduate standing.

12.572 Urban Transportation (3)

Development of and problems of land use; place in metropolitan planning; adjustment to changes in population, industry, and social life; financing; local transit authorities and interstate compacts; rates and service.

Prerequisite: 12.462.

12.662 Transportation Management (3)

Representative case problems in transportation management; location of facilities; selection of equipment; market analysis; financing new equipment; scheduling and other distinctive problems; motor carriers emphasized. Re-

quired of M.B.A. candidates electing Transportation as Comprehensive Examination Field.

12.762 Seminar in Transportation (3)

Advanced analysis of problems in public regulation of all modes. Discussion and supervised research. Problems of public policy. Required of Ph.D. candidates in Business Administration and Economics electing Transportation as Comprehensive Examination Field.

12.763 Seminar in Business Logistics (3)

Theory of business logistics. Management of flow of materials from source of supply through processing to ultimate marketplace delivery. Logistics concept in planning, policy formulation and strategy of production and marketing. *Required of Ph.D. Candidates in Business Administration and Economics electing Transportation as a Comprehensive Examination field.*

31.020 Physical Distribution and Traffic Management Institute (No Credit)

See Institutes.

31.021 Air Transport Management Institute (No Credit)

See Institutes.

31.022 Railroad Management Institute (No Credit)

See Institutes.

31.023 Motor Transportation Management Institute (No Credit)

See Institutes.

31.025 Ocean Shipping and Foreign Trade Management (No Credit)

See Institutes.

31.026 Workshop Conference on Coordinated Transportation (No Credit)

See Institutes.

Institutes

The American University pioneered in developing these specially designed University-level programs for further professional growth of men and women already basically educated by experience and previous education who wish to systematize and increase their knowledge and keep current.

This "continuing education" for practitioners has attracted registrants from all parts of the U.S. and from many foreign countries. Curricula for the management development programs are generally planned with the active cooperation of the profession or industry concerned. Institutes usually provide intensive instruction in a concentrated period of time to minimize leave from regular duties.

The following Institutes have been offered recently by the School of Business Administration. For Institutes offered by the Center for Technology and Administration see p. 297. Some are offered regularly, others on irregular bases. Most have descriptive brochures. Where academic credit is available, the numbers of hours is indicated.

31.001 Institute on Employee Communication (No Credit)

Theory, practice of employee-management communication. Principles, media, group relations, employees' opinion surveys. "How to do it" lectures by experts.

31.002 Institute on Materials Handling (No Credit)

Materials handling and packaging; principles, fields of activity, operating problems, space utilization, determining handling costs and efficiency. Organizational aspects.

31.003 Institute on Business-Government Relations (No Credit)

How laws affecting business are made; how business is represented in Washington; the political climate and the competitive system; how government is managed.

- 31.004 Energy Institute (No Credit)**
Integrated analysis for management personnel of energy industries of major common problems of production, distribution, consumption. Lectures, panel discussions, case analyses.
- 31.005 Institute on Profitable Management for Small Business (No Credit)**
Intensive management course for owners, operators, managers. Offered with cooperation of Small Business Administration.
- 31.006 Annual Tax Institute (No Credit)**
One day intensive workshop for attorneys, accountants, business executives on current tax problems, new legislation, regulations. Lectures by outstanding experts. Questions and answers.
- 31.007 Institute of Management for Appliance-TV Dealers (No Credit)**
Offered for National Appliance and Radio-TV Dealers Association. Principles of management, merchandising, budgeting, store organization and operation, advertising and promotion, etc. First Year and Advanced Programs.
- 31.008 Institute on Basic Tax Planning in Real Estate (No Credit)**
Impact of federal income and other taxes on real estate operations, presented in simplest possible terms and directed toward needs of real estate dealers, investors, financial institutions, and government officials dealing with real estate operations.
- 31.009 Advanced Institute on Tax Planning in Real Estate (No Credit)**
Sophisticated treatment for lawyers, public accountants, and those satisfactorily completing 31.008. Areas of emphasis: organization for real estate operations; corporate reorganizations, liquidations; demolition, abandonment; casualty losses; net operating losses; involuntary conversion; closely-held real estate corporations; residences, cooperatives; gift, estate tax impact.
- 31.010 Institute on Administration of Credit and Collections (No Credit)**
Managing the firm's investments in accounts receivable. Case studies dealing with policies, terms, instruments, sources, analysis of information.
- 31.011 Institute of Management for Electronics Representatives (No Credit)**
Offered for Electronics Representatives Association. Principles of management, efficient operation; marketing trends, developments.
- 31.012 Institute on Advanced Purchasing Management (No Credit)**
Professional development program for purchasing executives. Purchasing, materials management; organization, policies; legal principles, ethics; purchasing systems; records, procedures; inventory control; reports to top management.
- 31.016 Annual Value Engineering Institute (No Credit)**
Nature, functions, cost. Value Engineering as managerial adjunct in profit generation. Lectures, discussion, workshops. Offered with the cooperation of Society of American Value Engineers, Small Business Administration.
- 31.019 Institute for Program Evaluation and Review Techniques (PERT) (No Credit)**
How efficiency is gained by using Program Evaluation and Review Techniques. Accurate coordination of material, production, shipping schedules to meet important deadlines.
- 31.020 Physical Distribution and Traffic Management Institute (No Credit)**
Management development program for present and prospective traffic executives. Role of traffic management in sales, purchasing, market development. Effective organization, operation of traffic department. Developments in carrier services, facilities, rates, regulation.
- 31.021 Annual Air Transport Management Institute (No Credit)**
Intensive study of trends, problems of commercial, military air transport.

Changing competitive conditions; regulatory issues; interrelations of civil, military aviation. Effective approaches to principal management problems.

31.022 Annual Railroad Management Institute (No Credit)

Executive development program for executives directing operations, management procedures.

31.023 Annual Motor Transportation Management Institute (No Credit)

Executive development program for top, middle management executives. Current problems of economics, management, regulation.

31.025 Annual Ocean Shipping and Foreign Trade Management Institute (No Credit)

Efficient shipping management; finance; administration; merchant marine policy. Foreign trade developments and opportunities for American shipping. For executives programming, directing operations.

31.026 Workshop Conference on Coordinated Transportation (No Credit)

Workshop for analyzing principles, technology, management organization of coordinated transport systems. Profit potentials of coordinated transportation systems of two or more modes including rail, highway, air, water, pipeline. Problems of government regulation.

31.065 Institute on Church Program Development (No Credit)

Introduction to systematic procedures for designing unified programs of action to accomplish congregational purposes, objectives, goals. Obtaining facts, identifying problems, forecasting conditions, establishing policies, determining resources, formulating plans.

31.066 Institute on Church Financial Management (No Credit)

Professional guidance and practical assistance in administering church monetary resources. Budgeting, accounting, fund raising, purchasing.

31.068 Institute on Church Property Management (No Credit)

Intensive short course for clergy and laity who wish specific advanced education for their task of administering real estate and equipment for religious purposes. Using, maintaining, insuring, acquiring property.

31.069 Institute on Church Office Management (No Credit)

Development of further skill in administering office functions of churches and related non-profit organizations. Systematic programs of planning and staffing, housing and equipping, communicating and scheduling, recording and reporting.

31.070 Institute on Church Personnel Management (No Credit)

Responsible stewardship of human resources. Determining and describing staff positions; enlisting, assigning, and training staff personnel, both volunteers and employees; developing and maintaining staff morale.

31.074 Institute on Church Program Promotion (No Credit)

Basic concepts and procedures that churches and related non-profit organizations may apply effectively in seeking acceptance of and identification with their purposes, objectives, goals, accomplishments, potentialities, needs.

31.501 Institute on Business Finance for High School Teachers (3)

Seminars, discussions, lectures, field trips, to increase understanding of how business firms and individuals save, borrow, invest funds. Fellowships covering tuition, luncheons, books provided by D. C. Savings and Loan League.

31.504 Institute on Real Estate Appraisal I (3)

Official study Course I of American Institute of Real Estate Appraisers. Basic principles, methods, techniques. Satisfactory grade accepted by Appraisal Institute in lieu of Required Examination I.

Prerequisites: 11.576, 11.577 (or at least two years experience); also recommended background, 11.578, 11.585.

31.505 Institute on Real Estate Appraisal II (3)

Case study Course II of American Institute of Real Estate Appraisers. Urban properties: appraising procedures, capitalization techniques, case studies problems. Credit applicable towards membership in Institute.

Prerequisite: 31.504, Appraisal I of AIREA, or passing AIREA Examination I.

31.550 Institute on Modern Archival Administration (3)

Lectures and discussions on all phases of archives administration including Government, Business, Church, and College/University; laboratory experience in the National Archives, the Library of Congress, and the Maryland Hall of Records.

31.551 Institute on Records Management (3)

Offered in cooperation with the National Archives and Records Service. Emphasizes constructive approach aimed at effective and economical creation, maintenance, retention of records of maximum use to organization concerned.

31.552 Practicum in Data Processing (9)

Six weeks intensive review of fundamentals, current state of data processing. Special attention to electronic accounting machines, computers, computer programming.

Special Management Development Programs

In addition to the above Institutes, the School and the Center for Technology and Administration offer specially designed Programs on a contractual basis with government agencies, business firms, and associations.

Many organizations use the School's extensive course offerings for "custom tailored" management development programs. Selected executives being groomed for promotion are given leave for a semester to study full-time. Metropolitan Washington firms may utilize evening and late afternoon classes and thereby not need to provide time away from the job.

10.456 Principles of Management

10.457 Business Policy

10.400 Use of Accounting Methods

10.201 Business Law I

10.491 Personnel and Manpower Management have been found particularly useful as a foundation for Supervisor and Middle Management programs.

ADMINISTRATION

Dean

NATHAN A. BAILY, PH.D.

Associate Dean, Doctoral Program

NIKOS G. PHOTIAS, PH.D., LL.D.

Assistant to the Dean, M.B.A. Program

CHARLES L. SHAFFER, PH.D.

Assistant Dean, Under-graduate Programs

HARRY J. WHEATON, M.B.A.

Assistant Dean for Administration

FREDERIC H. GLADE, JR., PH.D.

Administrative Secretary

..... BLANCHE E. BURCH

For information, write directly to the appropriate administrative officer or Program Director of the subject-matter area. Note that the Transportation Program is headquartered at 1901 F St., N.W., Washington, D.C. 20006.

All Admission credentials should be sent directly to Director of Admissions, The American University, Washington, D.C. 20016.

THE FACULTY

(Date in parentheses following each name is the date of first appointment to the Faculty)

Full-Time

Professors NATHAN A. BAILY (1946), B.S. in S.S., College of the City of New York; M.A., Ph.D., Columbia (Dean)

CHARLES A. DAILEY (1964), B.A., Southern Methodist; Ph.D., Michigan

MARVIN L. FAIR (1958), B.A., Ohio; M.A., Ph.D., Ohio State (Director, Transportation and Logistics Program)

FREDERIC H. GLADE, JR. (1965), B.S., M.B.A., Ph.D., New York University (Assistant Dean, Administration)

JOSEPH E. HAMPTON (1961), B.S., Florida; M.A., Ph.D., Ohio State; C.P.A., Florida (Director, Accounting Program)

HOWE MARTYN* (1961), B.A., Toronto; M.A., Oxford (Director, International Business Program)

NIKOS G. PHOTIAS** (1949), B.A., Athens University; M.B.A., Handelshochschule-Koenigsberg; M.Sc.Pol., Ph.D., Albertus University-Koenigsberg; LL.D., Friedrich Wilhelm University-Berlin (Associate Dean, Doctoral Program; Director, Managerial Analysis Program)

RICHARD POWERS (1967), B.S., M.A., Ph.D., University of Virginia (Director, Center for Technology and Administration)

MYLES E. ROBINSON (1966), B.A., M.A., Ohio State; Ph.D., Northwestern (Director, Marketing Program)

* On sabbatical leave, 1967-68.

** On sabbatical leave, Spring 1968.

RICHARD HENRY RUSH (1967), A.B., M.C.S., Dartmouth; M.B.A., D.C.S., Harvard (Director, Finance Program)

JOHN H. SMITH (1947), B.A., Iowa State Teachers College; M.B.A., Ph.D., Chicago

HAROLD F. SYLVESTER (1967), Ph.D., Johns Hopkins (Director, Employee Relations and Production Management Program)

ROBERT MARTIN WEIDENHAMMER (1967), Ph.D., University of Jena, Germany

Emeriti ORTON W. BOYD (1959), B.A., M.A., Ohio State; C.P.A., District of Columbia

ELCANON ISAACS (1959), A.B., LL.B., Cincinnati; S.J.D., Harvard

FRITZ KARL MANN (1936), Dr.Jur., Goettigen; Ph.D., Berlin

WALTER F. MUHLBACH (1957), Ph.B., Chicago; M.A., Ohio State

ERNST POSNER (1939), Ph.D., Berlin

HAROLD B. WESS (1953), B.S., College of the City of New York

Associate Professors CHARLES F. AUSTIN (1967), B.S. in M.S., Maryland; M.B.A., D.B.A., Harvard

HERSCHEL CUTLER (1967), B.S., Boston; M.B.A., Pennsylvania; Ph.D., Syracuse

LAURA L. KARADBIL (1958), B.S. in B.A., M.B.A., American; C.P.A., State of Maryland

MARTIN L. KING (1960), B.S., Alabama; M.S., Washington; Ph.D., Ohio State

UDO E. KRAMER (1967), Abitur (B.A.), Staedt Gymnasium; Dipl. Kfm (M.B.A.), J. W. Goethe University-Frankfurt; Dr.rer.pol. (Ph.D.), Karl Franzens University-Graz, Austria

ALAN D. MORRIS (1961), B.E., Dr. Eng., Johns Hopkins (Director, Operations Research)

JAMES OWENS * (1961), B.A., Loyola; M.A., University of Chicago; Ph.D., Georgetown (Director, General Business Program)

HARRY ROSENTHAL (1955), B.S. in B.A., M.B.A., American

MAURICE SELDIN (1965), B.S., M.B.A., UCLA; D.B.A., Indiana (Director, Real Estate Program)

HARRY J. WHEATON (1959), B.B.A., Washington; M.B.A., American (Assistant Dean, Undergraduate Program)

**Visiting Associate
Professor**

MICHAEL SUMICHRIST (1967), B.S., Bratislava; M.B.A., Ph.D., Ohio State

Assistant Professors CHARLES I. BARTFELD (1966), M.B.A., Columbia

JAMES R. BUTTS (1964), B.S., Virginia Polytechnics; M.S., New York

EDWIN G. CAUDILL (1967), B.S., California; M. Litt., Pittsburgh (Assistant to Director, Doctoral Program)

REMBERT C. HOUSER (1965), B.S., Southern Louisiana; M.B.A., Alabama

ROBERT W. MILLER (1965), A.B., University of Pacific; M.B.A., Harvard (Director, Business-Government Relations and Business Law Programs)

JOHN O. QUIGLEY (1965), B.A., University of London; M.B.A., George Washington; C.P.A.

* On sabbatical leave, 1967-8.

Instructors	H. JOSEPH LEVINE (1967), B.S., Lehigh; LL.B., George Washington; LL.M., Georgetown RAYMOND LEWIS (1967), B.S., M.B.A., University of Buffalo
Director—Transportation Institutes	HERBERT O. WHITTEN (1967), A.B., Carthage; M.B.A., Harvard (Director; Transportation Institutes)

Part-Time

Adjunct Professors	C. CANBY BALDERSTON, B.S., M.A., Ph.D., Pennsylvania FRANK G. COOLSEN (1961), B.S., Northwestern; M.S., Ph.D., Illinois. <i>Senior Economist, Bureau of Economics, Federal Trade Commission.</i> WILLIAM R. DIVINE (1947), B.A., Pomona; M.A., Cincinnati; J.D., George Washington. <i>Controller, Southern Railway System.</i> CHARLES W. FOTIS (1961), A.B. Ed.M., Tufts; Ph.D., American. <i>Director, Civilian Training and Career Development.</i> CLYDE W. HUMPHREY (1961) B.S., Eastern Kentucky State; M.A., George Peabody; M.R.E., Wesley Theological Seminary (<i>Director, Center for Church Management</i>) HARRY W. KETCHUM (1939), B.A., Denver; M.B.A., Harvard. <i>Economist, Food Irradiation Unit, Office of Chemicals & Consumer Products, U.S. Department of Commerce.</i> ELMER C. KOCH (1940), B.S., M.S., Illinois; LL.B., Wisconsin. <i>Research Accountant, Securities and Exchange Commission.</i> MARTIN KRIESBERG (1951), B.S.C., Northwestern; Ph.D., Harvard. <i>International Agricultural Development Service, U.S. Department of Agriculture.</i> MELVIN E. LEWIS (1949), B.A., George Washington; M.A., American; C.P.A., Virginia, <i>Chief Accountant, Washington Metropolitan Area Transit Commission.</i> VERGIL REED (1965), B.S., Indiana; M.B.A., Ph.D., Columbia RALPH ROBEY (1963), A.B., Indiana; A.M., Ph.D., Columbia. <i>Economic Consultant and Lecturer.</i> SAM ROTHMAN (1961), B.S., Long Island; M.A., Ph.D., American. <i>Office of Naval Research.</i> ERNEST RUBIN (1958), B.S., City College of New York; M.A., Ph.D., Columbia. <i>Chief, Eastern European Section, Bureau of Foreign Commerce, Department of Commerce</i> HAROLD H. SHIVELY (1960), A.B., M.A., Ohio State; J.D., Chicago. <i>Dean Emeritus, School of Business Administration, University of Hartford</i>
Professorial Lecturers	MARTIN ATLAS, A.B., New York; A.M., Columbia; LL.B., George Washington. <i>Executive Vice-President, Cafritz Co., Realtor and Builder.</i> OSCAR BESSIO, B.S. in M.E., Cooper Union; M.S. in M.E., Columbia; M.B.A., American. <i>Deputy Chief of Staff for Logistics, Industrial Engineering Branch First Army HQ, Fort Meade.</i> HARRY A. BOSWELL, JR., B.S., Maryland; LL.B., Georgetown. <i>Realtor; City Planner; States Regional Representative to Appalachia Regional Commission</i> DONALD R. BRENNER, B.Sc., LL.B., Ohio State. <i>Attorney</i> WILLIAM J. BURNS, B.S., Maryland; M.B.A., American. <i>Executive Vice-President, Tri-State Motor Transit Co.</i>

W. DONALD CALOMIRIS, A.B.A., American; C.P.M., *Treasurer and Property Manager, William Calomiris Investment Corp.; President, Washington Chapter IREM*

LEO DAVID, B.A., George Washington; M.B.A., Harvard; C.P.M. *Vice-President and General Manager, Greenhoot, Inc., Realtor*

LAWRENCE DOBROW, B.A., New York. *Chairman of the Board and Creative Director, Lewis, Dobrow & Lamb, Inc., Advertising Agency*

BERNARD T. DODDER, B.S., Oklahoma A & M; M.S., Iowa State; C.P.A., State of Maryland. *President, Dodder Mutual Insurance Agency (ret.); Insurance Consultant*

WILLIAM C. DULIN, A.B., Western Reserve; M.B.A., Harvard; Ph.D., American. *Financial Assistant to the President, Acacia Mutual Life Insurance Company.*

JULIAN FELDMAN, B.A., Queens; M.S., Ohio State. *Executive Director, Washington Hebrew Congregation*

DAN H. FENN, JR., A.B., Harvard. *Commissioner, U.S. Tariff Commission*

ARTHUR M. FISHER, M.A.I., S.R.A., *Realtor; Chairman of Admissions, Member of Governing Council, AIREA.*

CARROLL B. FITCH, A.B., Michigan; M.A., New York University. *Administrative Officer, The Riverside Church in the City of New York*

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NELSON P. GRELLER, B.S. in C.E., New York; P.E., District of Columbia. *President, Nelson P. Greller & Associates, Management Consultants*

PROSPER N. HILL, B.A., Washington; M.B.A., Penn State; C.L.U. *President, Marsh Investment Co., Inc.*

RAYMOND W. HOECKER, B.S., Iowa State; M.S., Ph.D., Cornell. *Chief, Wholesale & Retailing Branch, Agricultural Marketing Service, U.S. Department of Agriculture; Past President, D. C. Chapter, American Marketing Association*

LEONARD I. JACOBS, B.C.E., College of the City of New York; P.E., District of Columbia. *Engineer, National Aeronautics and Space Administration; Consultant, Nelson P. Greller & Associates, Management Consultants*

OLIVER H. JONES, B.A., St. Francis; M.A., Connecticut; Ph.D., Penn State. *Director of Research, Mortgage Bankers of America*

MAXWELL KAUFMAN, B.A., Brown; M.B.A., Harvard. *Branch Chief, Corporation Finance Division, Securities & Exchange Commission*

ARNOLD M. KRONSTADT, B.M.E., George Washington; P.E., State of Maryland and D. C. *Partner, Collins & Kronstadt-Leahy, Hogan, Collins, Architects, Planners and Engineers*

EDWARD R. LEHMAN, B.S., State University of New York; M.B.A., Ph.D., New York. *Economist, U.S. Treasury Department*

JAC LEHRMAN, *Executive Vice-President, Giant Food, Inc.*

CARL H. MADDEN, B.A., M.A., Ph.D., University of Virginia. *U.S. Chamber of Commerce*

FREDERICK A. MARSTELLER, B.A., Washington & Lee. *Marsteller, McCabe & Co., Inc., Realtors*

FERD NAUHEIM, *Partner, Kalb Voorhis and Company; Direct Mail, Sales, and Sales Training Consultant; Past-President, Washington Sales Executives Club*

STANLEY NEHMER, B.S.S., College of City of New York; M.A., Columbia. *Deputy Assistant Secretary of Commerce for Resources*

JEROME P. PICKARD, A.B., M.S., Wisconsin; Ph.D., Syracuse. *Research Director, Urban Land Institute*

ROBERT F. POWELL, B.S., Yale; M.S., Cornell. *Naval Academy*

ALBERT M. PROSTERMAN, A.B., Illinois. *President, A. M. Prosterman & Associates, Marketing Consultants*

A. M. PROTHRO, B.A., Baylor; LL.B., George Washington. *General Counsel, Legal Division, Federal Housing Administration*

TED RABUN, B.S., Florida; M.S., Illinois; C.P.A. *U.S. General Accounting Office*

WILLIAM F. ROGERS, A.B., Arkansas. *Director of Industrial Relations, Giant Food, Inc.*

NATHANIEL H. ROGG, B.A., M.A., New York; J.D., George Washington. *Executive Vice President, National Association of Home Builders*

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DAVID SACHS, B.A., Michigan; M.B.A., Harvard; M.A.I. *Partner, George S. King Co., Realtors*

WILSON L. SCOTT, B.A., Yale; M.A., Ph.D., Johns Hopkins. *Director, Data Unlimited*

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RONALD G. BURKE, B.S., Ball State. *Personnel Manager, Research and Analysis Division of Booz, Allen Applied Research, Inc.*

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LOWELL R. DITZEN, B.A., William Jewell; B.D., McCormick Theological Seminary; D.D., Park; LL.D., Central. *Director, National Presbyterian Center*

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HUGO K. KOCH, B.A., Washington; M.H.A., Baylor

HELEN LATIMER, A.B., Duke; M.S., Columbia; M.B.A., American

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BART PAFF, B.A., University of Idaho; M.A., American.

LEROY E. PAGANO, B.G.S., M.B.A., Rollins, *Consultant*

HUGH G. E. PAULL, B.C.S., Benjamin Franklin. *Director of Business Administration, First Baptist Church of Washington, D. C.*

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STANLEY R. STEIN, B.S., Wharton.

HERBERT P. STUTTS, B.S., M.S., Maryland. *Dean, Summer Session, American*

RICHARD TAYLOR, *Director, Sales Training, Frederick W. Berens, Inc.; Assistant Vice-President*

CHARLES H. WARNER, B.F.A., Columbia. *Sales Manager, WTOP Radio*

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EDWARD A. WHITE, B.S. in B.A., LL.B., LL.M., Georgetown. *Salter & Company*

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Note: Part-time faculty teaching in the Technology of Management Curriculum are listed under the Center for Technology & Administration.

THE CENTER FOR TECHNOLOGY AND ADMINISTRATION

The Center for Technology and Administration was organized in 1958 by the School of Government and Public Administration to provide a vehicle for the study of the effect of the emerging technological revolution on the administrative process. In 1964, the School of Government and Public Administration and the School of Business Administration, with the cooperation of the Department of Mathematics and Statistics, jointly established the curricular area of THE TECHNOLOGY OF MANAGEMENT and assigned the administration of this area to the Center for Technology and Administration which became a joint instrumentality of the two schools. The Center is now a joint instrumentality of these two schools, the College of Arts and Sciences, and the College of Continuing Education.

This predominantly graduate program has grown steadily, and now comprehends Computer Systems, Operations Research, Management Information Systems, Scientific and Technical Information Systems, and Research and Development Management as fields of concentrated study. The Center also offers a major in Automatic Data Processing Systems at the undergraduate level for the School of Business Administration, and a Certificate in Automatic Data Processing for the College of Continuing Education.

The Center conducts Institutes and short courses in selected subjects taken from the management sciences and cybernetics. The purpose of these programs is to up-date managers and others responsibly concerned with the administration of business and governmental institutions.

PROGRAM AND CURRICULUM IN THE TECHNOLOGY OF MANAGEMENT

This program is the 55.000 series in the University course numbering systems. The Schools of Government and Public Administration and Business Administration and the Departments of the College of Arts and Sciences separately define the relation of the courses in this series to their respective degree program requirements. For details, see those individual programs.

In the operation of this Center and program over the past three

years, as a joint interest of the SBA and the SGPA, the orientation and emphasis of courses and comprehensive examination fields have reflected the interests of these schools in managerial applications and processes. The rapidly growing clientele of this program consists primarily of students who have these perspectives and needs, and the program will continue to serve their requirements.

However, as the Center for Technology and Administration extends its scope to meet the differing interests and needs of the Departments of the College of Arts and Sciences, it can be expected that other courses and comprehensive field groupings of courses will be added to those which are listed in the following pages of this *Catalog*. These program expansions are still in embryo. Consequently, the following discussion of the character and objectives of this Technology of Management curriculum relates to the structure as it now stands, with its orientation specifically to the requirements of SBA and SGPA. Future catalogs will bring additional perspectives.

In the last decade, business and governmental organization and activity have been affected with equal and similar force by revolutionary technological developments whose impact grows and changes at great speed and whose ultimate effect cannot yet be foreseen. The new instruments and methods for the handling of masses of information are a phenomenon of revolutionary magnitude. The information handling revolution has, in turn, led into a managerial revolution of major proportions. These dynamics of information and management are now worthy of, and require, the highest level of academic and professional attention. In this accordance of recognition to the subjects, the objective is the creation of academicians and truly professional technical managers who are masters of the full scope of institutional significance, not just technicians of communication with machines.

Since the characteristics of these areas are so nearly the same—whether the context be governmental, business, mixed, or neither—the separate responsibilities and student bodies of the School of Business Administration and the School of Government and Public Administration can be effectively served only if their resources and offerings are fully merged in a truly joint curricular program. The following sequence of courses in THE TECHNOLOGY OF MANAGEMENT is the joint offering of these two Schools, with the close participating association of the Department of Mathematics and Statistics for certain courses which are centrally essential. Further, because of the increasingly universal application of the Technology of Management, it is expected that other units of the University will both utilize and participate in these course offerings.

The student who wishes to study these areas as part of the frame of reference of business administration and management may enter this program through the channel of the School of Business Administration, specializing in these areas as part of the Bachelor of Science in Business Administration (major in Automatic Data Processing Systems); Master of Business Administration; Ph.D. in Business Administration; Ph. D. in Business Administration: Technology of Management; or the Executive Certificate or R&D Management Certificate Programs.

The student who is concerned with the governmental perspectives of

information, administration, and management may enter these programs through the channel of the School of Government and Public Administration, with the goal of M.A. or Ph.D. with specialization in The Technology of Management. This specialization is not offered at the undergraduate level, but the undergraduate major in political science can accomplish a considerable introduction to this field.

The general designator of THE TECHNOLOGY OF MANAGEMENT is used here to comprehend a broad spectrum of the systems characteristics of contemporary, and future, information and managerial methods and institutions. As dimensions of student program objective, these are best identified as programs (and graduate comprehensive examination fields) in: (M=MBA, MPA, & MA level. D=doctoral level)

55.63M—Computer Systems

55.63D—Computers have an impact on every aspect of the emerging managerial technique of communication and control within an organization. It is not sufficient for the manager to rely on his staff for an understanding of the capabilities of the machine. He must have a grasp of the limitations of this powerful tool from a first-hand intimacy through a balanced academic program of concentration on the programming, design, and application of the instrument.

55.64M—Operations Research

55.64D—Operations Research is a new outlook and a new approach to the scientific solution of problems in Business, Government, and Defense. The task of the Operations Research scientist is to study problems involving men, machines, money, and materials, and to provide management with the best solutions. Thus, the modern manager must be familiar with the language, concepts and tools of Operations Research and what is becoming known as "Management Sciences" in order to know where, when, and how they can be applied.

55.65M—Scientific and Technical Information Systems

55.65D—For academic and professional specialization in those systems dealing with the broad spectrum of the intellectual and machine-processing of the products of scientific and technical research and development such as the journal article, the technical report, the patent, and the state-of-the-art review. Functions of the special library and technical information center are treated in detail, including such procedures as technical writing and editing, computerized techniques of publishing, abstracting, indexing, search strategy, etc. Advanced seminars on special topics, such as library automation, thesaurus construction, and data centers round out the curricular offerings in this rapidly-developing area.

The Washington region, the national center of information activities, presents a unique opportunity for field trips, site visits, and similar practical application of course work.

55.66M—Management Information Systems

55.66D—For academic and professional specialization in those systems which: (a) perform the administrative processes of business

or governmental action; (b) alter and manipulate information within the storage subsystem to produce information and analysis for managerial planning, decision, and control; (c) produce the managerial decision by interrelation of information and pre-determined criteria; or (d) execute such decision by pre-programmed initiation, performance, and control of the operational action involved. This is the spectrum of the administrative, managerial, and performance systems of governmental and non-governmental institutions.

55.67M—Research and Development Management

55.67D—For academic and professional specialization in the formulation of research and development programs and the directing, control, and evaluation of their execution. The spectrum of offered managerial technology is, of course, intimately related to technical and scientific missions, be they in the business or governmental milieu. This program is especially designed to develop initially or further the professional competence of those people who are or expect to be responsibly concerned with the management of research and development projects.

55.68D—Sources of Scientific Information: One science.

This comprehensive field is open to Ph.D. candidates who have a Master's degree in a scientific discipline and wish to concentrate on the information sources of that discipline. This field will be taken only in conjunction with field 55.65—Scientific and Technical Information Systems.

THE CURRICULUM

In the curriculum which follows, the courses are in seven groups. The first is a series of fundamental courses which comprehend a variety of general aspects and basic concepts of the subject area of THE TECHNOLOGY OF MANAGEMENT. From this foundation, the student and his adviser will select those courses which support his own particular program objectives and which, as prerequisites, prepare him for the advanced courses which he will require.

The other six groups of courses are those related to the respective comprehensive examination fields which have been identified and described above. The student's options in choice of fields and his patterns of course and seminar work in the fields he chooses will differ for the SBA student and the SGPA student. In these choices and requirements, there will be further differences from program to program within the School of the student's registration. Each student, SBA or SGPA, will need to consult his respective School for the details of his requirements.

The student in the College of Arts and Sciences will need to consult his own Department about the possibilities for application of this curriculum to his own program requirements.

UNDERGRADUATE PREPARATORY COURSES

55.410 Introduction to Data Processing (3)

An introduction to the problems, principles, and methods of data processing, covering a variety of methods including the automatic data processing revo-

lution of the last decade and its significance for business and public administration and management. The course will generally survey types of data processing instruments, methods, systems, and the types and potentials of their applicational use. This course will equip the student to communicate with data processors. It will not, by itself, be preparation for technical employment in the field.

55.411 Introduction to Management Mathematics (3)

For those students whose undergraduate mathematics preparation does not include advanced algebra and therefore is not adequate for entry into the study of operations research, this course will cover mathematical logic, elementary point set theory, finite probability, Markov chains, difference equations, vectors and matrices and matrix games.

Prerequisite: 41.101. Not required where 41.110 and 41.111 (or equivalents) have been satisfactorily completed.

ADVANCED COURSES

55.511 The Systems Approach (3)

An introduction to the systems analysis approach to the study and design of managerial and operational organization and process. This course is fundamental to all other courses in this general sequence, or for anyone who expects to be responsibly concerned with the managerial, operational or control organizations and processes of business or government. This course will include problem exercises to illustrate the rigor of the discipline and the nature and scope of its applications.

55.512 Introduction to Cybernetics (3)

This course is an introduction to the abstractions of Cybernetics. The operational aspects of human intellect are translated into machine simulation and examined for validity of communication and control. The man-machine symbiosis is studied as a means to augment man's capability to solve complex problems. The stability of large and small systems through homeostatic control is another part of the course. Mathematical explanations are kept at a minimum.

55.513 Technology and Administration (3)

The effects of technological and scientific development on the organizational, operations, and staff functions of the public or private administrative establishment. The implications for the manager and the managerial unit of the information and cybernetic revolutions, and of modern technological instruments and methods for the performance of societal and administrative functions. The reciprocal effects of managerial requirements on technological development. Includes a general appreciation but not an intensive development of the significance of research and development for the general manager or administrator.

Courses Related to the Comprehensive Examination Fields

55.63M AND 55.63D—COMPUTER SYSTEMS

55.530 Automatic Data Processing Systems (3)

A survey of the systems aspect of ADP. Emphasis is placed on the computer organization and equipment operation, the concept of programming, data processing equipment, information and data systems, systems analysis, equipment acquisition and utilization, and data communication systems.

Prerequisite: 55.410 or equivalent experience.

55.531 Computer Design (3)

Boolean algebra, application of Boolean algebra to switching elements, control, arithmetic units and converters, error detection and correction, logic storage elements and sequential circuits, finite automata, Turing machines
Prerequisites: 55.530 and 55.411 or 41.111.

55.533 Computer Programming (3)

This course examines the components of electronic digital computers, number systems, computer words, instructions, address, logic, codes, subroutines, problem analysis, scaled operations, flow diagrams, code checking, and problem solving.
Prerequisites: 55.410 and 41.101.

55.561 Management of Automatic Data Processing Systems (3)

See Field 55.66 for course description.

Prerequisites: 55.530; and 10.456 or 53.353 or equivalent experience.

55.632 Advanced Computer Applications (3)

Applications to behavioral and management sciences, heuristic programming, artificial intelligence, simulation of cognitive processes, computational linguistics.

Prerequisites: 55.530 and 55.533. (Additional mathematical requirements may be necessary in specific subject coverages. See current session Schedule of Classes.)

55.635 Workshops in Computer Systems (3)

Higher level languages; procedure-oriented languages, FORTRAN, COBOL, PL-1, etc.; multi-processing, multi-programming; simulation languages; data transfer systems. These workshops will deal with one or more of the listed topics.

Prerequisites: 55.530 and 55.533. (Additional mathematical requirements may be necessary in specific subject coverages. See current session Schedule of Classes.)

SEMINARS:

Prerequisite: Permission.

55.735 Seminars in Computer Systems (3)

Offered with varying sub-subjects.

55.799 Doctoral Dissertation Seminar: Technology of Management (3)

55.64M and 55.64D—OPERATIONS RESEARCH

55.540 Operations Research in Management (3)

How operations research supports management; decision theory approach; applied decision theory; introduction to basic operations research models and problems; implementation of operations research solutions.

Prerequisites: 69.300 or 69.400; 41.111 or 55.411.

55.542 Probability and Statistics for Management Decisions (3)

Decision under uncertainty; cost of uncertainty; probability distributions; conditional models; Bayesian approach; sequential decision procedures; hypothesis testing; estimation.

Prerequisites: 69.300 or 69.400; 41.111 or 55.411.

55.544 Advanced Management Mathematics (3)

This course provides a review of the mathematics necessary for advanced work in Operations Research. It covers sets and relations; mathematical induction; series; limits and continuity; differentiation; optimization; integration of differential equations; probability theory.

Prerequisite: 41.111 or 55.411. Not required where 41.222 and 41.223 (or

equivalents) have been satisfactorily completed *recently*. This course will be required, as a prerequisite for 55.641, of students whose differential and integral calculus were taken more than ten years ago.

55.641 Methods of Operations Research I (3)

Sampling; inventory problems; replacement problems; waiting lines; competitive strategies; linear programming; sequencing; dynamic programming. *Prerequisites:* 55.540; 55.542; 41.223, 55.544 (as stated above).

55.642 Methods of Operations Research II (3)

Systems and simulation; developing and using models; evaluating industrial systems; applications with stochastic processes; schedule control; market evaluations; military, government and industrial problems. *Prerequisite:* 55.641.

SEMINARS:

Prerequisite: Permission.

55.745 Seminars in Operations Research and/or Management Science (3)

Offered with varying sub-subjects.

55.799 Doctoral Dissertation Seminar: Technology of Management (3-12)

RELATED COURSES

41.518 Linear Programming

41.519 Non-Linear and Dynamic Programming

55.65M and 55.65D—SCIENTIFIC AND TECHNICAL INFORMATION SYSTEMS

55.550 Types and Uses of Scientific and Technical Information (3)

An analytical study of the total process of, and requirements for, the effective communication of scientist-user. The types of purpose and system requirement: Institutional records; scientific, technical, and research reference; archives. The operational specifications as they derive from the end-use of the system, and their implications for original documentation, media, acquisition, abstracting, indexing, searching, and other sub-processes.

Prerequisites: 55.410; advanced undergraduate standing in a science major or graduate standing.

55.651 Technical Information Machine Systems (3)

The application of machine systems with major emphasis on the handling of technical literature and data. The analysis of the individual user requirement. The capabilities of mechanized systems, both simple and sophisticated, their applicabilities, feasibilities, and optimums of design in relation to user requirements. This course also lays the groundwork for the management information systems operation which are studied in detail in field 55.66.

Prerequisites: 55.530 and 55.550.

55.653 Concepts of Indexing and Abstracting (3)

An intensive specializing course in the control processes of indexing and abstracting. The taxonomy of information organization, identification, and storage. The philosophy of topical structure and designation. The methods of reducing the content of technical writings to abstract length without losing the essential elements of information. The varieties of indexing and abstracting methods will be treated in depth, with workshop experience and case review.

Prerequisites: 55.550 or 55.660.

55.654 Workshops in Technical Information Handling (3)

Specialization and practice in the common process subsystems of technical information machine systems: e.g., acquisition, indexing, abstracting, and

film media. The content will vary from semester to semester, with differing selections and combinations of process and use application. Students may repeat two or more times, providing only that content is not duplicated.
Prerequisites: 55.550 and 55.651.

SEMINARS:

Prerequisite: Permission.

55.755 Seminars in Scientific and Technical Information Systems (3)

Offered with varying sub-subjects.

55.799 Doctoral Dissertation Seminar: Technology of Management (3-12)

RELATED COURSES AND SEMINARS

55.561 Management of Automatic Data Processing Systems

29.576 Archival Administration; Modern Practice

55.66M and 55.66D—MANAGEMENT INFORMATION SYSTEMS

55.560 Systems Design for Business Operations (3)

The mechanization and automation of office operations. A practical course in the capabilities, applications, and design and use of systems for handling administrative data, cases, and processes. Punch card machines; electronic computers. For accounting systems design, see SBA 10.540.

Prerequisite: 55.530.

55.561 Management of Automatic Data Processing Systems (3)

Whether the use is technical information, administrative operations, or management information, the machine system itself has to be planned, installed and run. This course concerns: estimate of requirements; organizational arrangements; planning the total system; conversion problems; costs and performance evaluation; the executive role in achievement of integration
Prerequisites: 55.530; 10.456 or 53.353 or equivalent experience.

55.653 Concepts of Indexing and Abstracting (3)

See 55.65 field for course description.

55.660 Management Information and Reporting Systems (3)

The decision maker's information requirement. Related system performance requirements. Design and installation of the responsive system. PERT, CPM, and similar planning and control information systems. Problems and techniques of executive use of the system product. Interaction and integration of information processing systems and institutional records systems. Workshop in the design and installation of actual and model systems.

Prerequisites: 69.400 and 55.530.

SEMINARS

Prerequisite: Permission.

55.765 Seminars in Management Information Systems (3)

Offered with varying sub-subjects.

55.799 Doctoral Dissertation Seminars; Technology of Management (3-12)

RELATED COURSES

54.510 Management of Institutional Records Systems

55.67M and 55.67D—RESEARCH AND DEVELOPMENT MANAGEMENT

55.570 Management of Research and Engineering Organizations and Laboratories (3)

The basic course on the internal management of the research performance organization. The full spectrum of the elements of effective management as they apply in such organization. Comparisons of general management prac-

tices, in government and business, with the situation of the research organization.

Prerequisites: For undergraduates, 54.310 or 10.481. For graduate students, comparable course work or experience.

55.571 Creativity and Invention (3)

An interdisciplinary social science course directed to the understanding of creativity and invention and of the determinants of their occurrence and quality in persons and groups. The approach will combine scientific-historical case study with review of contemporary behavioral science knowledge. The practical purpose is to sensitize the R&D manager to this requisite of his organization and purpose, and to help him articulate managerial tools and policies for its maximization.

55.670 The Politics and Economics of Research and Development (3)

The magnitude, characteristics, and politico-economic significance of the R&D economy of the U.S. and, comparatively, of other countries. The structure and nature of the U.S. research industry. The government-business defense economy. Governmental non-military research. Business and industrial research. Trends and forecasts. National resources allocation, and other political and economic problems.

55.671 R & D in the Total Organization (3)

Criteria for top management decisions: (a) Capabilities of scientific, technological, and social science research; (b) utilization for needs of the specific organization; (c) definition of R&D requirements, in-house and/or external implementation, determination of budget; (d) evaluation of success and contribution to organizational objectives; (e) conversion of R&D results into governmental or business applications, products, or processes.

SEMINARS

55.770 Seminar in R & D Management: Scientific and Engineering Personnel (3)

Case problem seminar to determine the elements of effective personnel administration as they apply or differ in an organizational population of scientists and engineers. For the very advanced graduate student, or for the seasoned R&D or personnel manager.

Prerequisite: 55.570, a basic personnel course or equivalent experience.

55.771 Seminar in R & D Management: Planning and Control of Research Operation (3)

Operational policies and goals. Forecasting, planning, programming, financing, and scheduling. Resources planning. Marketing and customer relations. The review, control, and evaluation of research performance. The application of systems analysis in research evaluation and control. *Prerequisite:* 55.570, or equivalent experience and at least one other of the above R&D courses.

55.775 General Seminars in Research and Development Management (3)

Prerequisite: Permission.

55.799 Doctoral Dissertation Seminar: The Technology of Management (3-12)

Prerequisite: Permission.

55.68D (doctoral only)—SOURCES OF SCIENTIFIC INFORMATION: ONE SCIENCE

As stated in the introductory description of comprehensive fields, this field will be available, very selectively, only to Ph.D. students who also elect 55.65 *Scientific and Technical Information Systems*. The related course work or independent study or research will depend on the particular scientific field involved, and will be individually planned for the student on the basis of what is available from cooperating science departments in this University or the other members of the Consortium of Universities.

55.785 Seminars in Scientific Information Sources (3)

Offered with varying sub-subjects.

Prerequisites: 55.550, 55.651, and permission.

55.799 Doctoral Dissertation Seminars: The Technology of Management (3-12)

Prerequisite: Permission.

Institutes

Each year the Center for Technology and Administration arranges a series of short intensive Institutes intended to assist in up-dating executives in the many facets of managerial Science and Technology. Treatment of the material presented is geared to current status, as well as to the impact that new knowledge will have on each separate field of endeavor which is the subject of an Institute.

While each year's Institute program varies widely, there are certain "subject" areas which are usually included in each schedule. These are:

The Institute on Records Management

The Institute on Managerial Implications of Electronics in Publishing (covers the area of Automation in Printing and Publishing.)

31.051 The Institute on Research Administration (includes Policies of Government Originated Research Programs)

The Institute on Introduction to Modern Archives Administration (the 1968 offering will be the 22nd Annual Archives Institute)

31.052 The Institute on Information Storage and Retrieval (covers Compatibility Problems, Economics of Information Center Management, Relationships to Advancement of Technology)

FACULTY

Full-Time

RICHARD POWERS, Director and Professor; B.S., M.A., Ph.D., Virginia

ALAN D. MORRIS, Associate Professor; B.E., Dr.Eng., Johns Hopkins

MARVIN I. ROSENBERG, Assistant Professor; B.S., U.S. Naval Academy; M.S. Purdue

ISAAC D. WELT, Professor; B.S., M.S., McGill; Ph.D., Yale

Part-Time

Adjunct Professors FRED R. BROWN, Professor of Management, Industrial College of the Armed Forces; A.B., M.S., Ph.D., Pennsylvania

RALPH I. COLE, Consultant in Management; B.S., Washington University; M.S., Rutgers

CHARLES W. FOTIS, Director for Employee Training and Career Development, Dept. of Defense; A.B., Ed.M., Tufts; B.S., M.S., Tufts; Ph.D., American

PAUL W. HOWERTON, Director-Client Services, EBS Management Consultants Inc.; Ph.B., Northwestern

ELLIS A. JOHNSON, Coordinator of Science Communications Activities, HEW; B.S., M.S., D.Sc., Massachusetts Institute of Technology

SAM ROTHMAN, Deputy Director, Exploratory Development Division, Hqs. Naval Materiel Command; B.S., Long Island University; M.A., Ph.D., American University

Professorial Lecturer LESTER A. BARRER, Principal Consultant, EBS Management Consultants; B.S., Rutgers; M.Sc., Yale; M.S., N.Y.U.

MARTIN BINKIN, Chief, Air Force Program Documentation Branch; B.S., Washington University; M.B.A., Michigan

JOSEPH T. CAMPAGNA, Army Program Manager, Control Data Corporation; A.B., William & Mary

WILLIAM DOREMAN, Chief, Operations Research Group, ESSA; B.A., Pennsylvania; M.S., Ph.D., Pennsylvania

HAROLD E. FASSBERG, Senior Operations Research Analyst, Research Analysis Corporation; A.B., Ohio; M.A. Pittsburgh

SAMUEL P. GINDER, Senior Scientist, Dunlap & Associates; B.S., U.S. Naval Academy; M.E.A., George Washington

CARL HAMMER, Director, Scientific Computer Marketing, UNIVAC; B.S., Luitpold Oberrealschule, Munich; Ph.D., Munich

ROY HERRMANN, Member Scientific Advisory Board, John I. Thompson; Consultant, General Electric Co.; University Rostok, Germany—Dr. Rerum Politicarum

PAUL J. HYMAN, Data Systems Analyst, DOD; B.S., Cornell; M.A., George Washington

BURTON D. JONES, Data Processing Officer-U.S. Army; B.S., Western Michigan; M.B.A., Arizona

SAMUEL G. KNEALE, Principal Scientist, Operations Research, Inc., A.B., M.A., Kansas; Ph.D., Harvard

WALTER J. KENNEVAN, Director, Data Processing Systems Division, Office of Navy Comptroller, B.C.S., M.C.S., M.F.A., Columbus (Catholic)

M. HOWARD KRAMER, Project Engineer, Federal Systems Center, IBM; B.E.E., Rensselaer Polytechnic Institute; M.E.E., N.Y.U.

ROBERT M. LANDAU, Data Processing Consultant, U.S. Govt.; B.S.E.E., Indiana Technical College; L.L.B., B.S.B.A., M.A., American University

EDWARD M. MCCORMICK, Head, Data Processing Center, National Science Foundation; B.S., M.S., Kansas State College of Pittsburg

LAWRENCE L. MCGOWAN, Consultant to AIR Staff, U.S.A.F.; B.S., Omaha; M.S., Texas A&M

MILOS G. PACAK, Research Assistant, Georgetown University; L.L.D., Pol. Sci. D., Charles University; Prague

JACOB PERLMAN, Consulting Economist in Science and Technology; B.A., M.A., Ph.D., Wisconsin

JOHN P. PUHALA, Vice President, Management Information Systems, B-R Data Systems, Inc., B.A., Penn State; M.A., American University

S. JOSEPH SCHNEIDER, Systems Assurance, IBM; B.S., Long Island; M.A., N.Y.U.

T. ARTHUR SMITH, Director of Cost Analysis, Department of the Army; B.A., M.A., George Washington

ELIAS VAN KRUGEL, Employment Development Officer, U.S. Govt., B.A., M.A., George Washington

ERNST VOLGENAU, Systems Analyst, Office of Assistant Secretary of Defense; B.S., U.S. Naval Academy; M.S., Air Force Institute of Technology; Ph.D., UCLA

DAVID C. WEEKS, Senior Scientist, Dunlap & Associates; B.A., McGill University, Montreal; M.A., Ph.D., University of London, Kings College, England

RONALD WIGINGTON, Chief, System Evaluation Division, N.S.A.; B.S., Kansas; M.S., Maryland; Ph.D., Kansas

ROBERT A. YORKS, Instructor, USAF; B.S., Penn State

Lecturers WILLIAM ALDRED, Data Processing Officer, Data Service Center, USAF; B.A., North Carolina; M.S., Texas A&M

ROBERT E. BARRETT, DOD Computer Institute; B.A., Nevada; M.B.A., Arizona

RICHARD BASSLER, Special Assistant to Director of Data Automation, USAF; B.S., Colorado

CHARLES R. BLAIR, Chief, Information Processing Research Division, NSA; B.S., George Washington

ROBERT L. BLAKE, Chief, Management Systems, PHS; B.S., Long Island University; M.P.A., Syracuse

LEONARD E. BROCK, Head, Systems and Procedures, USN; B.A., N. Texas State College; M.S., USN Postgraduate School

RAYMOND F. BROGAN, Supervisor, Digital Computer Programmer, Defense Com. Agency; B.S., St. Joseph's College, Philadelphia; M.A., George Washington

FERDINAND P. DIEMER, Director, Special Projects, Bunker-Ramo Corp.; B.E.E., Cooper Union; M.E.E., NYU

MARY D'IMPERIO, Data Systems Analyst, NSA; B.A., Radcliffe; M.A., Pennsylvania

NORMAN R. L. ENGER, EDP Manager, NCR Co.; B.A., College of City of New York; M.A., Columbia

LOUIS H. FISLER, Instructor, Operations Analysis, U.S. Naval Academy; B.S., U.S. Naval Academy; M.S.O.R., U.S. Navy Post-Graduate School

NORMAN S. GLICK, Mathematician, N.S.A.; B.A., Harvard; M.A., American

JERRY E. GRAY, Mathematician, USAF; B.A., M.S., Texas A&M

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MILTON GUSSOW, Project Engineer, Office of Naval Research; B.S., U.S. Naval Academy; B.S.E.E., U.S. Naval Post-Graduate School; M.S., M.I.T.

FREDERICK G. HAROLD, Digital Computer Systems Analyst, U.S. Civil Service; B.A., College of Wooster

ROBERT HARRIS, Instructor, DOD, Computer Institute; B.S., Oklahoma State

PAUL H. HILDENBRAND, Executive Officer, CIA; B.S., Maryland

DOUGLAS HOGAN, Senior Engineer, NSA; B.S., George Washington; S.M., M.I.T.

RUSSELL B. IVES, Chief, Mathematics Branch, Air Force Technical Applications Center; B.S., Mississippi Southern College; M.S., University of Southern Mississippi

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HAROLD R. JOHNSON, Advanced Professional Education Program, USAF; B.S., Maryland; M.S., George Washington

JEROME S. KAMCHI, Program Analyst, Hqs. Army Medical Center; B.I.E., NYU; M.B.A., Temple

RICHARD E. KEAR, Head, ADP Staff, Federal Power Commission; B.A., M.A., City College of New York

JOHN P. KELLY, Chief, Program Branch; Directorate of Data Automation; USAF; B.B.A., Manhattan College

JERRY G. KNOTSON, Instructor, Operations Analysis, Naval Academy; B.S., U.S. Naval Academy; M.S., U.S. Naval Post-Graduate School

JOHN M. LLOYD, JR., Systems Analyst, IBM; B.S., Kent State University; M.A., George Washington

JOSEPH H. KUNLY, Director, Business Operations Publications Research, American Chemical Society; B.S., Chicago; M.A., American

VLADIMIR G. MARINICH, Instructor, DOD; B.A., M.A., New York University

EDWARD P. MATTHEWS, Chief, Manpower, Civilian & Reserve Branch, USAF; B.S., Maryland; M.B.A., Denver

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HARVEY I. MELLION, Chief, Automation Division, Bolling AFB; B.S.E.E., Colorado; M.A., George Washington

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HENRY C. MOON, Electronic Data Processing Officer, USAF; B.S., Georgia Institute of Technology; M.S., Stanford

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RICHARD R. OEHLER, Mathematician, DOD; B.A., St. John's University

DONALD E. OPPERT, Mathematician, DOD; B.S., George Washington, M.S., Harvard

DONALD J. O'ROURKE, Senior Account Representative, RCA; B.A., Los Angeles State; B.A., Sacramento; M.B.A., American

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JOHN J. PENDRAY, B.E.S., Florida; M.C.S., Stanford

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DAVID WEINSTEIN, Programmer, CIA; B.E.S., Johns Hopkins

KENNETH O. YUNG, Project Head, System Development Corp.; B.S. in M.E., Buffalo; M.E.A., George Washington

SCHOOL OF GOVERNMENT AND PUBLIC ADMINISTRATION

CONCEPTS AND PROGRAMS

The School of Government and Public Administration has been made a separate school in the organization of The American University in order to emphasize and take best advantage of the special opportunities of the Washington, D.C., location for the teaching and study of these subjects. The school seeks to share the special educational and research possibilities of this location with the student body of The American University and with the students and faculties of other educational institutions throughout the United States and the world.

The fundamental educational goal of the School is to give each of its students the knowledge, the framework of moral values, and the motivation to fulfill better his personal role in the universal obligations of democratic citizenship. Beyond this the School seeks to provide special elements of knowledge, perspective, and social ideals which are needed by those who will participate, by teaching or action, in the politics, policies, or administration of government.

The Academic Educational Program

The teaching function, undergraduate and graduate, is the first obligation and emphasis of this School. The undergraduate program is designed and scheduled for the full-time, daytime, undergraduate student, and the requirements for the undergraduate Political Science major *cannot be completed* on a part-time evening basis. The graduate program is designed and scheduled for both the full-time graduate students and the part-time graduate student who is limited to evening classes.

THE UNDERGRADUATE PROGRAM will contribute an understanding of government and public affairs as an aspect of a broadly cultural education. It will, additionally, prepare the American student for an enlightened role in American national or community affairs, or the foreign student who intends a comparable role in the country of his origin or adoption. This program will aid those students who major in other subjects for careers which tangentially involve government and public affairs. It will provide the subject matter content for those preparing for teaching careers in government and political science at the secondary level. This program may be a professional education which prepares the student for entrance upon a career in government at a junior professional level. It will provide a solid and comprehensive foundation for the student who pursues more specializing education before entering a career in public affairs or politics, governmental administration, or in teaching or research in these subjects.

THE GRADUATE STUDY PROGRAM is an opportunity for intensive academic or professional education for careers of teaching, research, or action in the fields of Politics and Government, Public Administration and Management, or the Technology of Management in its governmental aspects. For the objective of college and university teaching, graduate study in this School will prepare for a first career or, equally, for a new career direction. This program will prepare for the research which is a central element of an academic career, or for the increasingly possible research career in non-academic research institutions. Except for careers in foreign policy and international relations, which are the province and role of the School of International Service, the curriculum of this School comprehensively affords preparation for a wide variety of active careers in political, administrative, or other aspects of governmental or public service. For the person who is already well established in one or another of these career patterns, this curriculum can up-date him in the trends and changes in the areas of his responsibilities, or can give him the new perspectives and skills which he may need for a broader and higher future responsibility.

In all aspects of these education programs, the full-time resident faculty is the foundation, but it is supplemented by an excellent and exceptionally versatile and able part-time faculty which is selectively used for those courses in which its specialties will enhance the coverage and quality of the academic offering. In this respect, the Washington area is unusual, not only in the very large number of people who are highly qualified for such part-time faculty service, but also in the extraordinary degree to which these people are willing to make themselves available for such service.

The Research Program The School of Government and Public Administration believes that these propositions are fundamental in the present and future relation of political science research to government, to academic institutions, and to educational graduate programs:

To be a truly sophisticated preparation for the student's future, a modern graduate study program must be intimately interwoven with the processes, the facilities, and the products of creative scientific probing of the research frontier.

In political science, no less than in scientific, technological, and other social science fields, the research of the future will increasingly be carried out under the interdisciplinary team concept, with the increasing admixture of the physical and bio-sciences as well as the other social sciences.

A comprehensive and penetrating understanding of the potentials, the processes, and the limitations of research has become imperative for the practitioner of governmental affairs as well as for the teacher or researcher. The future practitioner will be helpless without the support of research and, to obtain it, he will need to appreciate and define his requirements. The present student who is the future researcher will need to fulfill standards of competence and creativity of increasingly higher rigor. The teacher has much to do to produce the people who will fulfill the demanding requirements of the practitioner and the researcher.

Through a developing structure of University centers, this School expects increasingly to provide its graduate students, and its faculty as well, with opportunities to fulfill these requirements.

In its existing CENTER FOR TECHNOLOGY AND ADMINISTRATION, the University has a going organization of substantial experience and of substantial academic, research, and service capability in the whole general field of the dramatically new Technology of Management, including the information and managerial revolutions, the impact of technology on administration, machine intelligence, and the technical specifics of the field of automatic data processing. This is an extraordinary opportunity for the research experience which the contemporary graduate student requires.

The American University is working actively to develop further centers in the fields of government-business relations, labor relations, the problems of the planning and government of metropolitan areas, and the politico-economic problems of the developing nations. These, as they develop, will be designed and used to fulfill the research component of the graduate student program requirement.

There are scores of governmental and non-governmental research organizations in the Washington, D.C. area. These constitute extensive opportunities for internships and employment for those graduate students in the School who have the beginnings and need the disciplined intensification of experience in the conduct of complex and important research effort in socio-political or administrative affairs.

The University, the School of Government and Public Administration and the special centers which will administer research effort will be available for research tasks which lie within these general areas and are consistent with the educational values and objectives of the institutional research interest. The University is not interested just in performance of routine research service and will exclude research possibilities which do not further integrally its educational purposes and the intellectual development of the research participants.

The Educational Cooperation Program

The School of Government and Public Administration will do everything possible, within its capabilities and resources, to share the special opportunities of the Washington, D.C., location with other schools and departments of political science, government, and public administration throughout the country, and the world. In this respect, although necessarily without prior commitment, it will cooperatively consider the performance of any kind of service which will cut the intellectual distance between a sister educational institution and Washington, D.C., in educational and research affairs. The regularly organized aspects of this interest and effort include the following activities:

THE WASHINGTON SEMESTER: By which selected students, from schools which enter formal participating agreement, spend one semester of their junior or senior years in academic residence in the School of Government and Public Administration in a specially designed academic program of familiarization in the affairs of the Federal Government. The Schools which participate in this program are listed on page 314.

THE PUBLIC AFFAIRS LABORATORY: By which, through individual regis-

tration or inter-institutional agreement, undergraduate and graduate students or faculty members of other schools may spend a summer term in Washington in individualized directed study in Federal Government subjects.

COMPARATIVE GOVERNMENT WORKSHOP ABROAD: Organized group study overseas, in selected areas to be determined and varied from time to time on the basis of need and opportunity. This may occur in the summer or during the regular academic year, as required by demand and permitted by resources.

THE WASHINGTON GRADUATE YEAR: Through which the School of Government and Public Administration will provide educational counsel direction, and facilities, in academic *loco parentis*, for students pursuing graduate study or research under registrations in other graduate schools.

FACULTY EXCHANGES: The School of Government and Public Administration will try, from time to time as it may be able, to work out arrangements by which its faculty members may exchange places for one year with faculty members of other institutions who have exchangeable teaching interests.

SABBATICAL ASSISTANCE: When faculty members of sister institutions wish to spend a sabbatical period in Washington, D.C., the School of Government and Public Administration will be pleased, within its capabilities, to provide them with office and library services and intellectual fellowship and assistance.

RESEARCH COOPERATION: If a sister academic institution or a research organization is engaged in a research task within the criteria of the University's research interests and within its potential for helpful cooperation, the School of Government and Public Administration invites discussion of the possibility.

The Public Service Program INSTITUTES AND WORKSHOPS: In addition to the academic program of the regular educational curriculum, the School of Government and Public Administration and the related University study centers conduct a continuing program of special training institutes and workshops.

These may be given on a short period, full-time basis, or with spacing over more extended time.

The general criteria for the offering of such institutes and workshops are these: The subject must be an intellectually and professionally worthy problem which can be presented within the capability of the regular faculty or of *ad hoc* experts associated for the purpose under the direction of the faculty. The activity must be self-supporting except as prior underwriting is assured for any margin of shortfall in this respect.

Such an activity may be undertaken for and in cooperation with a governmental or non-governmental organizational entity which arranges for it in furtherance of its own organizational purpose, or it may be organized by the School for unorganized people who have a common interest and requirement.

These activities may be offered with simply a certificate of completion or achievement without academic credit, or with academic credit

if they have been evaluated by the academic authority of the University as fulfilling the time and quality criteria for such credit.

The School invites inquiries from those who have a requirement for this type of service.

CONSULTATIVE AND ADVISORY SERVICE: The members of the School faculty and the related special centers represent a wide variety of expertise in matters of public, political, and administrative affairs. Insofar as possible without interference with academic commitments, it is the policy of the School and the University to encourage faculty and staff members to provide professional consultation and advice on the basis of individual arrangement.

For those public, eleemosynary, or governmental organizations and activities which are fully and truly public in interest and purpose, this School, in matters of special significance and merit and subject to its own basic obligations and commitments, may assume institutional responsibility for the provision of consultative and advisory service. Such effort may variably be with or without reimbursement, depending on the character and merit of the instance and the capability at the time.

SPECIAL ASSISTANCE FOR FOREIGN OFFICIALS AND ACADEMICIANS: The School recognizes the special problems of foreign officials and academicians who come to the United States to seek methods and solutions for their own political and governmental problems. If the School can design special academic programs for their needs, it will do so, but with or without such academic relationship, the School will assist and consult with them to the extent of its capabilities.

This includes a special program of studies in Applied Administrative Management, which may carry from 3 to 9 hours of academic credit for students who have an adequate academic foundation and proficiency in English. This program is open to foreign governmental administrators, operating officials, and staff officers. It is limited to participants who are assigned by the Agency for International Development, or by foundations and other organizations which sponsor foreign officials for training programs in the United States.

THE GOVERNMENTAL CAREER COUNSELING PROGRAM: As an integral aspect of its academic program, the School will counsel its own students, and those of other institutions with which it has formal educational cooperation arrangements, with respect to their capabilities, their ambitions, and their career development requirements.

Within its capabilities, the School will attempt to provide such counseling for non-students of a professional level of attainment or of pre-professional interests, but it reserves the possibility of need to charge a fee for such service if the volume of requests should become an interfering drain on faculty time and institutional resources.

Washington Semester The Washington Semester is a cooperative arrangement between The American University and more than ninety accredited colleges throughout the United States. As part of the University's professional work in government, one hundred undergraduate honor students come to the School from participating colleges and universities. Washington Semester students study with government officials and take guided field trips to various government agencies, bureaus, and departments. Their

semester in Washington culminates in a research paper. In addition, the student is enrolled in regular courses at the University. These major curriculum features are planned to provide an individually integrated program for each student, to give him greater insight into our national government, and a familiarity with the sources for study of specific governmental problems.

The School of Government and Public Administration administers the Washington Semester. The participating colleges are grouped into units. Students from each unit are individually advised and directed during the semester by an academic director whose primary responsibility is the conduct of the Washington Semester for his unit.

Cooperating institutions include:

Albright College	Hiram College
Alfred University	Hobart and William Smith College
Allegheny College	Hollins College
American University, The	Hope College
Augustana College	Houston, University of
Austin College	Hunter College
Baldwin-Wallace College	Illinois Wesleyan University
Beloit College	Iowa Wesleyan University
Bethany College	Juniata College
Birmingham-Southern College	Kansas State University
Bucknell University	Kansas Wesleyan University
Carleton College	Knox College
Carnegie Institute of Technology	Lehigh University
Carroll College	LeMoyne College
Centenary College of Louisiana	Lindenwood College
Centre College of Kentucky	Luther College
Chatham College	Lycoming College
Cincinnati, University of	MacMurray College
Clark University	Maryville College
Concordia College	Millikin University
Cornell College	Millsaps College
Davidson College	Monmouth College
Davis and Elkins College	Montana State University
Denison University	Moorhead State College
DePauw University	Morningside College
Dickinson College	Muskingum College
Doane College	Nebraska Wesleyan University
Drury College	North Central College
Elmhurst College	Occidental College
Elmira College	Ohio Wesleyan University
Emory University	Oklahoma City University
Florida Southern College	Otterbein College
Franklin College of Indiana	Park College
Gettysburg College	Pomona College
Grinnell College	Queens College
Hamline University	Randolph-Macon Woman's College
Hanover College	Redlands, University of
Hartwick College	Rockford College
Hastings College	St. Andrews Presbyterian College
Heidelberg College	St. Olaf College

Seton Hall College
 Simmons College
 Simpson College
 Southwestern College
 Stetson University
 Susquehanna University
 Sweet Briar College
 Thiel College
 Tougaloo College
 Transylvania College
 Union College
 Valparaiso University
 Wabash College

Washington College
 Wesleyan University
 Western College for Women
 Western Reserve University
 Westminster College (Mo.)
 Westminster College (Pa.)
 Westminster College (Utah)
 Wheaton College
 Willamette University
 Wilmington College
 Wittenberg University
 Wooster, The College of

STUDENT ACTIVITIES

For information on student activities, see the forepart. The following are activities that will be of special interest to students in the School of Government and Public Administration.

Political Science Honorary Fraternity Beta Psi Chapter of Pi Sigma Alpha, national political science honorary fraternity, was chartered at The American University in 1955. Undergraduates with junior standing with "B" average and graduate students with better than a "B" average and a minimum of twelve semester hours of courses in government, public administration and international relations are eligible for election to membership in the fraternity. Pi Sigma Alpha sponsors public lectures in the field of government and public administration and other projects. It is an especially important organization for the graduate student of the School.

Society for Advancement of Management An active student chapter of the Society for Advancement of Management provides an opportunity for student majors in public administration and business administration to come together in the study of management. Activities of the Chapter include field trips, special projects and social events.

Area Professional Associations Many national professional associations have Washington area chapters. Students are welcome to attend their meetings and participate in other program activities. Among them are the American Political Science Association, the American Society for Public Administration, the Society for Advancement of Management, the American Public Relations Association, the Society for Personnel Administration and the Public Personnel Association.

THE UNDERGRADUATE POLITICAL SCIENCE PROGRAM

Degrees This program leads to the degree of Bachelor of Arts in Political Science.

The School of Government and Public Administration no longer offers the program and degree of Bachelor of Science in Public Administration. The faculty of the School believes that a broad foundation in Political Science is the best undergraduate preparation for a career of teaching, research, or practice in the field of Public Administration, and that specialization in the field should come at the graduate level.

The curriculum will include a few courses available to undergraduates in the subject of Public Administration, for use exclusively in special programs, such as the curriculum in police science, for part time and off-campus students.

The program and degree of Bachelor of Arts in Political Science are available through registration in the School of Government and Public Administration *or* in the College of Arts and Sciences. In this Political Science major program as set forth below, there are slight differences between the SGPA and the CAS programs. These are clearly specified in the body of the program. The CAS student will also have some other requirements which do not apply to students in SGPA.

Admission and Retention Requirements Requirements for admission to or continuation in this undergraduate program in this School are the same as for students in the College of Arts and Sciences.

University Requirements Political Science majors, whether in SGPA or CAS, are bound by the general University Requirements stated in the General Information Section of this catalog. See page 28.

School or College Requirements For Political Science majors who are registered in SGPA, the School has no additional requirements except the features of the Political Science major program as defined below. Political Science majors in CAS will be responsible for certain additional requirements, such as foreign language, as prescribed by that College.

Foreign Language Course Regulation Undergraduate students majoring in the School of Government and Public Administration are not required to take foreign language. However, if a student wishes, he may.

It is necessary to complete successfully the second session of a beginning or intermediate foreign language course to receive academic credit for the first session of the same course. Academic credit is not awarded for a single session of language study at these levels. This includes beginning and intermediate intensive language courses.

Graduate Record Examinations The School of Government and Public Administration does not require its graduating seniors to take any portion of the Graduate Record

Examinations. However, many graduate schools throughout the United States do require such examinations as a condition of consideration for admission. Graduating seniors who may later decide to undertake graduate study would be wise to take some or all of the tests of the Graduate Record Examinations. The Director of Testing and Guidance should be consulted for advice on which tests to take for the individual student's needs.

Students who hope to enter the employment of the United States Government should know that high score in the Aptitude Test of the Graduate Record Examinations will be accepted in lieu of the Federal Entrance Examination as a basis for consideration for Federal employment. Such students also would do well to take this Test.

At the beginning of the fall semester, seniors who wish to take such examinations should write directly to The Educational Testing Center, Princeton, New Jersey, for information about the times and places for taking such tests in the Washington, D. C. area.

Outline of the Political Science Major and Program Related Requirements

All majors in Political Science, whether in SPGA or CAS, will look to the Associate Dean of the School of Government and Public Administration, and the SPGA faculty advisers who assist him, in the development of their programs.

For the SGPA Political Science major, the program outlined here is a 54-hour package. For the CAS Political Science major, it is a 51-hour package. If completed in the terms described, either of these major program patterns will cover:

Honors Program By student application, and by selection by the Associate Dean of SGPA during the student's junior year, American University Political Science majors may take two honors courses (56.498, 56.499) for six hours during the senior year. Students so selected and registered may substitute this honors track for any one of the three 6-hour sequences required under paragraph 2, Fields of Specialization (page 308. With successful achievement, such students will receive their bachelor's degrees with Honors, High Honors, or Highest Honors.

For selection, the student must have, in course work taken prior to the selecting decision, a 2.0 average in all course work, and a 2.25 average in all course work taken under the requirements of this Political Science Major Program structure. The two courses (56.498, 56.499) constitute this honors opportunity. They will normally be taken in the order listed, one each semester. With the approval of the Associate Dean of SGPA, they may be taken concurrently in the same semester. Both courses are offered every semester.

Requirements The general University Requirements feature of 12 hours of *Social Science* distributive studies.

The Political Science or International Relations courses required in the major program.

The requirement of the major program for 12 hours of related

studies in courses outside the Political Science and International Relations curricula.

The following *are not* covered by either the 54-hour SGPA pattern or the 51-hour CAS pattern:

- Any general requirements by CAS of its own students.
- The University Requirements features of 12 hours each in the Humanities and in Natural Sciences and Mathematics and six hours in Composition and Reading.
- The further electives required to complete 120 hours.

POLITICAL SCIENCE MAJOR

This program for the Political Science major is outlined here, and given in detail in the full undergraduate curriculum following:

1. FOUNDATION COURSES: All 15 hours required.

53.100 Modern Government 33.200 Introduction to World Politics
53.150 U.S. Political System I 53.300 Research and Political Science
53.250 U.S. Political System II

2. FIELDS OF SPECIALIZATION: 18 hours required.

(a) 6 hours in each of three fields
or (b) 6 hours in each of two fields, and 3 hours in each of two others
or (c) (for students who are selected for the senior honors track) 6 hours in each of two fields and six hours in honors courses 56.498 and 56.499.

A) Theory of Politics and Government

53.310 Political Theory I
53.410 Political Theory II

B) Foreign and Comparative Government

53.330 Comparative Government I
53.430 Comparative Government II

C) International Relations

33.440 International Law and Organization
33.450 Contemporary International Politics

D) Public Law and Legal System

53.350 U.S. Constitutional Law I
53.450 U.S. Constitutional Law II

E) The Political and Electoral System

53.351 Political Dynamics
53.451 Political Parties and Interest Groups

F) National Policy Processes

53.352 Legislative Process
53.452 National Executive

G) Administrative System

53.353 Administrative Process
53.453 The Bureaucracy

H) The Metropolis

53.354 Government and the Metropolis
53.454 Metropolitan Political Systems

I) * Government and the Social Order

*53.355 Government, Economics, and the Social Order

*53.455 Problems in Economic and Social Policy

3. A ONE-COURSE CHOICE FOR SGPA SENIORS: 3 hours. (Not required of CAS students.)

53.400 Research and Political Science II

53.401 Senior Research Seminar

53.460 Perspectives in Government and Politics

4. RELATED COURSE REQUIREMENTS:

For SGPA students: 18 hours, required of all Political Science majors in courses outside of SGPA. These may be courses in any other social science subjects or in statistics, but not more than six hours may be taken in any one of the subjects of statistics, international relations, technology of management, or public administration.

For CAS students: 18 hours to include the following specific courses:

19.100 Introduction to Economics I (3)

19.101 Introduction to Economics II (3)

And 12 additional hours of social science courses at the 300-level or above. (History and/or Economics are recommended.)

GRADUATE STUDY

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult the Dean's office for the latest information.)

The graduate study programs of the School of Government and Public Administration lead to the degrees of Master of Arts, Master of Public Administration, and Doctor of Philosophy.

A Master of Arts program may be taken in the fields of Government, Public Administration, or Public Administration: Technology of Management.

A Master of Public Administration program may be taken in the fields of Public Administration or Public Administration: Technology of Management, but not in the field of Government.

A Doctor of Philosophy program may be taken in the fields of Government, Public Administration, or Public Administration: Technology of Management.

For all graduate degree programs in this school, admission application is directed to the Office of Admissions.

Foreign Students See page 20

SPECIAL CONSIDERATIONS FOR POTENTIAL FOREIGN GRADUATE STUDENTS: The School of Government and Public Administration welcomes applications for graduate study from qualified students from other countries. The School will make every possible effort, within its

* Applicable only as electives for CAS students.

resources, to provide the special counseling and instruction which may be required to improve their possibilities for success in such programs. It offers special programs in public administration which are designed especially for, and limited to, foreign officials and students. Certificates of achievement are offered in these special programs. They do not lead to the master's or doctoral degrees, and they avoid many of the problems which confront the foreign student who enters a program of regular graduate study.

In the experience of this School, many foreign students in the regular academic graduate degree programs have not fulfilled their seeming academic potential. This School is making a strong effort to reduce this problem, and it hopes that an understanding of the causes may help the potential foreign student to avoid it. Unless the student is fully prepared and ready for graduate degree study, he risks the waste of his time and resources and the possibility of serious injury to his hopes and ambitions.

The potential foreign graduate student is urged to realize that a very high level of mastery of English is essential. A level of possession of English which is even fluently adequate for social and reading purposes will not be sufficient. A solid academic foundation in the subject area to be studied is a necessity. As a consideration particularly for the foreign student who comes from a non-Western culture, it is equally imperative that he have the foundation of *thorough* acculturation in the intellectual style of Western culture. If he is not easily able to understand how his instructors think, not just what they say, he is not yet prepared.

As the foreign student is considered for admission to this School, he will, in most cases, be admitted only provisionally, with the requirement of at least a semester in residence to provide an opportunity for careful assessment of the adequacy of preparation for graduate degree study. If he is found unready, he may be required to go through an extensive program of intellectual and language preparation before he will be further considered for admission to a graduate degree program. In some circumstances, a supplemental tuition charge may be required to cover the additional burden of faculty time and attention which may be necessary to provide adequate academic assistance before or after admission to degree study.

**Time limits for
completion of graduate
degree programs**

See pages 41 and 44

Unless it was part of a completed degree program, graduate work taken more than twelve years before admission or readmission will not be applied or accepted by transfer.

Required Graduate

Registration See pages 41 and 45

If any student has been inactive for more than five years, he may normally expect to have to retake comprehensive examinations, even if previously passed, and he may be required to retake some or all of the course requirements for his program.

GRADUATE DEGREES

Master of Arts in Government, Public Administration, or Public Administration: Technology of Management

Admission requirements Presumptively, an overall undergraduate record of 1.5 on a 3.0 scale and 2.0 in the major, or 12 hours of relevant graduate work with a 2.0 average. Admission on a lower record, if granted, may be made provisional.

A background of relevant undergraduate work is preferred, but is not necessarily required. The insufficiently prepared student may have to take from twelve to twenty one hours of intensive preparatory courses, at either a graduate or undergraduate level, in addition to the normal 30 hour program requirement. These foundation requirements vary by program and may change from time to time. Detail may be obtained from the office of the Dean.

Course requirements See page 39

A minimum of 30 hours of program-related graduate work, including six hours under the research requirement stated below.

All M.A. students in all three program fields are required to take *53.610 Scope and Method of Political Science Research I*, and one further three-hour course, as a general requirement, which will differ with the program field.

Quality requirement An average of B or better. Whether full-time or part-time, a Master's degree student will be terminated if his cumulative average stands below 2.0, on a 3.8 scale, at the ends of two successive terms including summer sessions.

Comprehensive Examination Fields The bulk of the student's M.A. program will consist of 12-15 hours of course and seminar work in each of two of the comprehensive examination fields shown in the graduate curriculum of this catalog. The details of this requirement may be obtained from the office of the Dean. At the end of his course work, the student will take a written comprehensive examination in each of his two fields. See page 324, 326 for list of comprehensive fields.

Research Requirement The student will normally fulfill his six hour research requirement by taking an M.A. Research Seminar for three hours in each of his two comprehensive fields, with completion of a research paper in each seminar with a grade of B or better. With the approval of the Dean, which will be given only very selectively, this requirement may be met:

(a) By registration for six hours in *56.797 Master's Thesis Seminar*, and completion of an acceptable Master's thesis; or (b) by completion, with a grade of B or better, of 12 credit hours through registration in *56.630 Government Internship*.

Master of Public Administration in Public Administration, or Public Administration Technology of Management

This is a professional program and degree. It does not prepare for or lead to admission to subsequent Ph.D. study. The student who achieves the M.P.A., and then seeks admission to Ph.D. study, may expect to have to make up six hours of the difference between the M.A. and the M.P.A. program requirements.

In all respects of admission and requirements, the M.P.A. program will be the same as for the M.A. program except: *53.610 Scope and Method of Political Science Research I* will not be required for the M.P.A., and the research requirement will be just one research seminar instead of two.

Doctor of Philosophy in Government, Public Administration, or Public Administration: Technology of Management

Admission Requirements M.A. or equivalent, with a better-than-B record. Provisional admission is possible on a poorer record, but not likely.

A relevant academic foundation at undergraduate and Master's level is preferred. It is not necessarily required. The student who does not have the necessary foundation for his Ph.D. program may be required to take substantially more than the normal 60-hour program requirement, including the possibility of undergraduate preparatory courses for no credit.

Course Requirements See page 42

A minimum of 60 hours of approved graduate work, not including the dissertation requirement. The last 30 hours must be completed in residence at The American University. At least 18 hours of the 60 must be in .600 or .700-level courses. All doctoral program students are required to take *53.611 Scope and Method of Political Science Research II*. While each doctoral student will be the judge of his own need for any particular course in any of his comprehensive examination fields, he is required to take at least one advanced seminar in each of his three non-dissertation fields. Details of the course requirements are available from the office of the Dean of SGPA.

Quality Requirement An average of better-than-B. This will normally be interpreted as being 2.25 or better on a 3.0 scale.

Advancement to Candidacy The student will apply for advancement to candidacy after 18 hours. He may be terminated at this time if he has failed to maintain the quality requirement or if, for other reasons, the Dean and faculty conclude that he does not show high probability of completing the

program with high, not just minimal, performance, or that he does not fulfill the requisite standards of personal character.

The review of the student at the stage of advancement to candidacy may include a review of record or oral or written examination, as the dean and faculty of the School may determine, either as a general policy or as special action in an individual case.

Written Comprehensive Examinations Examination in four comprehensive fields at the end of course work. The fields and related courses are given in the graduate curriculum immediately following. Each examination will be a requirement for the coverage and synthesis of the subject-matter of 12-18 hours of course and seminar work in the field. The SGPA faculty reserves the possibility of a further oral examination immediately following, for each doctoral candidate who passes his written comprehensive examinations. This requirement, if applicable, will be entirely separate from the later oral defense of the dissertation.

Tools of Research Two tools of research, certified through proficiency examinations or by completing specific courses prescribed by the department which administers the particular tool. SGPA students must certify one tool, at least, prior to admission to comprehensive examinations. The other must be certified before final approval of dissertation proposal.

These tools may be: foreign languages, accounting, statistics, mathematics, educational and psychological tests and measurements, or other quantitative tool approved by the Dean. For approval, such tools must have a reasonable probability of relevance to the student's future research interests. For Ph.D. candidates in Public Administration or in Public Administration: Technology of Management, statistics and mathematics are presumptively required as *the* two tools. The Dean may approve a substitution in a rare case for strong reason.

Dissertation and Oral Examination A dissertation, accomplished under registration for twelve semester hours in one of the doctoral dissertation seminars listed in the graduate curriculum. This requirement is fulfilled by the completion of an acceptable dissertation and by successful defense of the dissertation in a final oral examination. The basic dissertational standard is that of a high quality of original research in a subject which is directly relevant to the student's doctoral program emphasis.

The subject of the dissertation will normally be expected to lie within the boundaries of one of the candidate's four comprehensive examination fields. At the discretion of the candidate's dissertation committee, the oral examination may include the comprehensive field in which the dissertation is written, or the candidate's total graduate program.

Part-time doctoral students are strongly urged, if such is at all possible, to plan to spend at least one semester in fulltime residence at the stage of the development of the dissertation proposal and the initiation of the research.

GRADUATE PROGRAMS

Since the detailed program requirements for each degree differ and are subject to change, they are not included in this catalog and are available separately from the Office of the Dean. However, the foundation requirements and the comprehensive examination fields of the three curricular areas of the graduate degree programs are outlined below.

Politics and Government

Foundation Requirements The following foundation requirements are the absolute minimum of preparation necessary for the M.A. and Ph.D. degree program in the curricular area of Politics and Government.

53.600—Political Thought of the Modern State

(or an equivalent of six hours of undergraduate course work, or three hours of advanced course work in political theory.)

53.630—Comparative Government-I

(or an equivalent of six hours of undergraduate comparative government.)

53.650—Graduate Survey of American Government

(or an equivalent of six hours of undergraduate course work in American national, state, and local government.)

And at least six hours of undergraduate course work, or three hours of advanced course work, .500 level or above, in international relations.

Course work taken to fulfill these requirements will not apply against the basic 30 hours of the M.A. program.

Comprehensive Examination Fields Comprehensive examination fields in Politics and Government for Ph.D. and M.A. degrees are as follows:

53.060—Political Philosophy

53.061—Scope and Method in Political Science

(This is not offered at this time as a comprehensive examination field option for either the M.A. or Ph.D. levels.)

53.062—Science, Technology, and Government

This comprehensive field is required of all Ph.D. candidates in Public Administration: The Technology of Management.

53.063—Comparative Government

53.064—Politics and Administration of Developing Countries

53.070-77—Country and Regional Specialization (for non-SGPA students only)

53.070—Europe-USSR

53.071—Middle East-North Africa

53.072—China-Far East

53.073—South-Southeast Asia

53.074—Latin America

53.075—Atlantic Nations

53.076—Communist Nations

53.077—Africa

53.065—The American Governmental System

53.066—Political Dynamics

Because this is the area in which the behavioral sciences approach has especially been applied, the courses related to this subject are oriented from the theoretical and functional point of view, with heavy emphasis on the application of the theory and functional perspective to the American political context.

53.067—Public Law and the Legal System

General principles of jurisprudence and legal theory. American public law, including constitutional, statutory, and administrative law; the nature of judicial review; the role of the courts in the political system. The development and interpretation of constitutional doctrine. The organization, powers, and relationships of the federal and state courts. The role of the Supreme Court.

53.068—Urban Affairs

53.069—Government and the Social Order

An interdisciplinary view of an area which has become a major responsibility of government and a focus of political decision-making. An examination of the causes of governmental intervention into the economic and social organization of society, the techniques and instruments employed, and their consequences for the individual and society. Inescapably, this field will intersect with the curricula in economics, sociology, and business administration. However, the SGPA courses are not substitutes for, or duplications of, those perspectives. They will emphasize the theory and practice of the governmental process, not the theory and substance of those other areas of knowledge in which the substantive policy answers must be found. The Master's level student who elects this field ought to have substantially more economics than the prerequisites strictly call for. The Ph.D. student ought to take a parallel field in economics if he does not already have a substantial equivalent.

Public Administration and Management

Admission Requirements If any MA, MPA, or Ph.D. student in this area has not had an equivalent for any of the following courses, it will be required as a condition of admission. For any of the three-hour graduate courses listed, six semester hours of comparable undergraduate work are required for equivalence.

53.650—Graduate Survey of American Government (3)

53.670—Constitutional Law and the Supreme Court (3)

or 53.671—Administrative Law and Process (3)

Six advanced-course hours from political theory, political dynamics, or psychology. (6)

All graduate degree students in Public Administration are strongly advised to take all three of the following *no credit* courses, if they do not have equivalents, and it is probable that these will become requirements in the early future.

55.410—Introduction to Data Processing (0)

55.411—Introduction to Management Mathematics (0)

(or 41.110 and 41.111)

69.400—Managerial Statistics (0)

Comprehensive Examination Fields Comprehensive examination fields in Public Administration and Management for M.A., M.P.A. and Ph.D. programs are as follows:

54.060—The Governmental Administrative Establishment

This field emphasizes the character and functions of the administrative institutions of government—the bureaucracy as an institution, the sociology of the large administrative organization, and the relationships of the administrative establishment, as a whole, with the other institutions and functions of government. The theory and practice of the internal management of the departmental level of governmental agency is the subject of field 54.061.

54.061—The Management of the Governmental Administrative Establishment

This field concerns the large governmental department as the unit of management, the theory and practice of accomplishing its management, and the criteria and methods of analysis of such an agency to increase the effectiveness of its operations and its management.

54.064—Governmental Financial Policy and Program

54.065—Public Personnel Administration

Archival Administration (transferred to Department of History.)

54.067—One Specialized Staff or Line Function

This field is offered to permit specialized study in subjects such as correctional administration, police administration, etc. It will presumptively be available only for M.P.A. students in Public Administration, although it may selectively be authorized for M.A. or Ph.D. students with special SGPA faculty approval. Such a field will be approved (M.P.A., M.A., or Ph.D.) only if this School has the faculty capability for adequate direction of the subject, or if an adequate and integrated pattern of courses in the subject is available at one of the other institutional members of the Consortium of Universities. Courses for such a field: such A.U. or Consortium courses or independent study or research arrangements as are specifically relevant for the individual student.

54.068—Correctional Administration

A comprehensive examination field, administered by the Institute for Correctional Administration, for students in the CCE program for M.S. in Correctional Administration. Consult Mr. Howard Gill, downtown, 1903 "F" Street, N.W.

The Technology of Management

This is a joint program with the School of Business Administration and the College of Arts and Sciences. This program is administered by the Center for Technology and Administration.

For graduate students in the School of Government and Public Administration, the comprehensive examination fields and courses in this curricular area lead to the degrees of Master of Public Administration (Technology of Management) and the Master of Arts or Ph.D. in Public Administration: Technology of Management.

The general outline of the requirements for these graduate degree programs, for students in the School of Government and Public Administration, appears on page 295. The full details of these requirements can be separately obtained from the office of the Dean, SGPA.

- Foundation Requirements** If any MA, MPA, or Ph.D. student in this area has not had an equivalent for any of the following courses, it will be required as a condition of admission. For any of the three-hour graduate courses listed, six hours of comparable undergraduate work are required for equivalence.
- 53.650—Graduate Survey of American Government (3)
- 54.610—Modern Public Management-I (3)
(Students who have a primary interest in *55.65: Scientific and Technical Information Systems* may substitute three hours of linguistics, .500 level or above, for this course.)
- 55.410—Introduction to Data Processing (0)
(or two years of employment experience in data processing.)
- 55.411—Introduction to Management Mathematics (0)
(or 41.110 and 41.111)
- 69.400—Managerial Statistics (0)
(or 69.202 and 69.300)

MA and MPA programs in Technology of Management will require 33 graduate credit hours in addition to this foundation.

For any student who intends to take comprehensive field *55.64: Operations Research*, six hours of calculus will be required if the student has had none, or *55.544: Advanced Management Mathematics (3)* will be required if his calculus is older than ten years.

Comprehensive Examination Fields These fields are listed in The Center for Technology and Administration section of this catalog.

UNDERGRADUATE COURSES

53.001 Political Science Student Orientation (0)

Required of all entering freshmen and transfer students who have less than 30 hours of credit. Charge.

FOUNDATION COURSES

These courses (15 hours) are required of all Political Science majors.

53.100 Modern Government (3)

A comprehensive introduction to the study of Political Science, with emphasis on the theory, processes, and institutions of politics and government in the modern world. The nature and functions of political systems in society. Principal ideological conflicts today. Theory and practice in countries in varying stages of economic and political development.

53.150 The U.S. Political System I (3)

The development of the governmental system of the United States. Contemporary federalism, including the changing relationships of national, state, and local governments. The major institutions of policy-making at the national level. Concepts of representation in the American political system.

53.250 The U.S. Political System II (3)

The processes of politics and public policy making, emphasizing the dynamics of public policy formation in the U.S. Federal system. Consideration is given to the major institutions of state and local government.

Prerequisites: 53.100 and 53.150.

33.200 Introduction to World Politics I (3)

An SIS Course required of all students in the undergraduate political science curriculum.

53.300 Research and Political Science I (3)

An introduction to social science research: sources, approaches, and methods, as they relate to Political Science.

Prerequisite: at least nine hours of SGPA or SIS courses and Junior standing.

Fields of Specialization

THE THEORY OF POLITICS AND GOVERNMENT

The following two courses cover: nature and basic concepts of political theory; social origins and functions of political ideas; the study of selected political theories beginning with Plato; the political theories of the modern state; an introduction to contemporary political doctrines.

53.310 Political Theory I (3)

Prerequisite: 53.100.

53.410 Political Theory II (3)

Prerequisite: 53.310.

FOREIGN AND COMPARATIVE GOVERNMENT

53.330 Comparative Government I (3)

A comparative study of the constitutional systems and governmental, legal, and political institutions and processes of Great Britain, France, West Germany, and the USSR, in the context of their historical development, social and economic structure, and cultural setting.

Prerequisites: 53.100 and 53.150.

53.430 Comparative Government II (3)

The governmental and political institutions and processes of developing countries, to include India, Communist China, and other selected areas.

Prerequisite: 53.330.

53.448 Government and Politics of Latin America (3)

This course is strictly elective, and does not apply toward Political Science major program requirements.

Prerequisite: A course in comparative government or some aspect of Latin America.

For students who want a narrower focus on the political institutions of regional groups of countries, a series of .400 level SIS courses is available to be taken under the related courses category. These courses are *not* substitutes for 53.430 in this field of specialization in Foreign and Comparative Government. Also, see the SGPA graduate curriculum for a group of .500 level country and regional courses in foreign governments.

INTERNATIONAL RELATIONS

33.440 International Law and Organization (3)

33.450 Contemporary International Politics (3)

Both SIS courses. For Political Science majors, 53.100 should precede.

PUBLIC LAW AND THE LEGAL SYSTEM

53.350 U.S. Constitutional Law I (3)

Basic concepts of jurisprudence; historical development of the Anglo-American legal system; the nature of the adversary process; the American legal system, state and federal; structure, jurisdiction, and relationships; the development of American concepts of constitutional law and the Supreme Court as its expositor; development of major constitutional doctrines to the Reconstruction period.

Prerequisites: 53.150 and 53.250.

53.450 U.S. Constitutional Law II (3)

Topical and historical treatment of major constitutional doctrines since Reconstruction: interpretations of the 14th Amendment: due process and equal protection; development of the national powers of commerce and taxation, and their implications for the federal system; interpretations of the First Amendment as applied to national and state legislation: control of the administrative process; current constitutional problems and trends.

Prerequisite: 53.350.

THE POLITICAL AND ELECTORAL SYSTEM

53.351 Political Dynamics (3)

The nature and roles of public opinion, interest groups, and political parties in pluralistic societies. Emphasis on American politics. Concepts of political behavior and techniques of political action. Problems in political participation, communication, leadership, decision-making.

Prerequisite: 53.150.

53.451 Political Parties and Interest Groups (3)

The party system and group politics in the U.S. The functions, organization, techniques of political action. Elections and election behavior. Problems in practical politics.

Prerequisite: 53.351.

NATIONAL POLICY PROCESSES

53.150 and 53.250, together, will treat the total policy-making system of the U.S. governmental structure. For the student who elects this specialization, these two courses will emphasize Congress and the Presidency as two major organs of the policy-making system at the national governmental level.

53.352 The Legislative Process (3)

The United States Congress: its organization, rules, and procedures, and its relationships with other parts of the political and governmental system.

Prerequisites: 53.100; 53.150; 53.250.

53.452 The National Executive (3)

The Presidency in law and practice: its relation to Congress, the public, the party structure, and the administrative establishment, and its responsibilities in foreign and military affairs.

Prerequisites: 53.100; 53.150; 53.250.

THE ADMINISTRATIVE SYSTEM

53.353 The Administrative Process (3)

Administration in the public sector, its principles and processes. Analysis of the development of public administration as a discipline and its relationship to other disciplines. Survey of the techniques of modern public administration.

Prerequisites: 53.100; 53.150; 53.250.

53.453 The Bureaucracy (3)

The nature and functions of bureaucracies in modern government, with emphasis on the U.S. Federal executive. The relationship of bureaucracy to the political process. The administrative organization and management of the public sector.

Prerequisite: 53.353.

THE METROPOLIS

53.354 Government and the Metropolis (3)

Growth of cities and metropolitan areas. Emergence of the urban environment as a focus for public policy. Implications of metropolitan development

and functions for the organization of government and politics in the United States. Impact of the metropolis on governmental programs.

Prerequisites: 53.150, 53.250.

53.454 Metropolitan Political Systems (3)

A comparative study of approximately five U.S. and foreign metropolitan areas, with attention both to their political organizations and to their responses to problems such as urban design, transportation, public safety, finance, housing, etc.

Prerequisite: 53.354.

GOVERNMENT AND THE SOCIAL ORDER

(Available only as electives for CAS students.)

53.355 Government, Economics, and the Social Order (3)

The forces which have shaped government's role in the social and economic order. Emphasis on institutional change, ideological development, and constitutional doctrines, which together determine the scope, content, and character of government's role. The relationships and implications of this role for the individual and the ideal of liberty.

Prerequisites: 53.100; 53.150; 53.250.

53.455 Problems in Economic and Social Policy (3)

The governmental instruments and processes employed in the implementation of policy: directive, persuasive, promotional, exemplary, advisory. Examination and analysis of substantive policy and program areas: labor, anti-trust, transportation, health and medical care, poverty, fiscal management, and "the new economics".

Prerequisite: 53.355.

A ONE-COURSE CHOICE FOR SGPA SENIORS

(from the following)

53.400 Research and Political Science II (3)

An advanced course in the scope and method of research in the field of Political Science, with special emphasis on the techniques of social science research and on their application to specific problem areas. Intended for those who plan to continue in graduate study. The combination of 53.300 and 53.400 will be equated with the graduate course 53.610 Scope and Method of Political Science Research I.

Prerequisites: 53.300 and Senior standing.

53.401 Senior Research Seminar (3)

With variable scheduling from semester to semester, possibly with differing concurrent sections, this seminar will be: (1) an undergraduate research seminar, available for a few selected students for supervised experience in individual or team research in matters of government and politics; or (2) a seminar, for a few selected students, to provide 3 more hours of specialization in the subject of one of the preceding six hour tracks (e.g. political theory).

Prerequisites: Senior standing as a Political Science major and permission.

53.460 Perspectives in Government and Politics (3)

A synthesis for the finishing senior on the relation of the institution of government to its intellectual, social, and scientific environments. This course will vary from semester to semester, as determined by the particular student group, the instructor, and the contemporary public problems of the moment. It will make use of important visiting lecturers. It may be taken in either semester of the fourth undergraduate year, but not more than once for credit.

Prerequisites: Senior standing as a Political Science major and permission.

Honors and Tutorial Courses

- 56.498 Honors Tutorial Reading in Political Science (3)**
56.499 Honors Seminar and Public Affairs Laboratory in Political Science (3)
56.390 Undergraduate Reading Course (3)
As arranged with a supervising faculty member.
56.490 Individual Research Project (3)
As arranged with supervising faculty member.
56.495 Tutorial Seminar for Undergraduate Foreign Students (No Credit)
The vehicle for registration for special assistance in inter-cultural and academic problems to foreign undergraduate students who have need of such assistance. The cost of registration in this seminar will be determined on a special fee basis, ranging from \$200 to \$500 per semester depending on the character and extent of the assistance required.

The Washington Semester

- 56.410 Washington Semester Seminar I (3)**
56.411 Washington Semester Seminar II (3)
56.412 Washington Semester Research Project (3)
All nine hours required. For advanced students enrolled from cooperating institutions, through formal inter-institutional agreements of this program. The study of U.S. government in action, through seminars with senior representatives of U.S. Government agencies, reports, conferences, lectures, and guided seminar evaluations of experience. The research project is the requirement of an individual analytical report, prepared under the guidance and counseling of the academic directors of the program.
Prerequisite: Selection. All offered every semester.
Washington Semester courses, as listed above, are primarily for students who come from other institutions under the arrangements of the Washington Semester Program. A selected few Political Science majors from the American University may participate in the program each semester. For those so selected, the nine hours of this program may be substituted for any one of the six-hour sequences required under paragraph 2 above, and may be used for the achievement of Honors in Political Science in the same way as the honors courses which are also described above.

Police, Correction, and Public Safety Administration

The following courses are maintained for use in off-campus programs, as required for specially stated student program patterns:

- 54.480 Background of Police Work**
54.481 Introduction to Police Administration
54.580 Principles of Police Administration
54.581 Police Investigation
54.582 Traffic Planning, Regulation, and Control
54.583 Accident Investigation
54.585 Criminalistics
54.586 Problems in Criminalistics
54.587 Correctional Administration
54.588 Fire Administration

- 54.589 Civil Rights and Civil Liberties in Law Enforcement
 54.592 Criminal Law I
 54.593 Criminal Law II

ADVANCED COURSES

This course listing includes a few .500 level courses which are available to advanced undergraduate students who meet the prerequisites, and which may also be taken for credit by graduate students. Most of these courses are at the .600 or .700 level, and are open only to graduate students in non-degree or degree program status.

This presentation of this curriculum is organized as follows:

- Politics and Government
- Public Administration and Management
- The Technology of Management
- Special Courses and Internships

The first three of these are the curricular areas of the graduate degree programs. Within each of these, the courses are grouped by comprehensive examination fields.

Politics and Government

COURSES RELATED TO THE COMPREHENSIVE FIELD 53.060 POLITICAL PHILOSOPHY

53.600 Political Thought of the Modern State (3)

An intensive analysis of the major political philosophers from the Renaissance to the Twentieth Century. For graduate students who have not had a course in modern political theory. This, or equivalent, required in all M.A. and Ph.D. programs in Government.

Prerequisite: graduate standing.

53.601 Foundations of Western Political Thought (3)

Political thinkers, theorists, and movements from Plato through the Middle Ages. Earlier theoretical foundations of Western Civilization and its political institutions and concepts. Appropriate reference to the contributions of Oriental philosophies.

Prerequisite: graduate standing.

53.602 Contemporary Political Thought (3)

Background and major issues of Twentieth Century political thought. Contemporary theories and ideological movements. Theoretical implications and contributions of functionalism and behavioralism.

Prerequisite: 53.600, or equivalent, and graduate standing.

53.603 Marxist and Non-Marxist Socialism (3)

Origins and characteristics of socialist philosophies, ideologies, and doctrines, and their relations to derivative political movements. Their significance for contemporary understanding of the ideological orientations of the developing and the communist nations.

Prerequisite: 53.600, or equivalent, and graduate standing.

53.604 American Political Theory (3)

Major concepts and ideas of American political thought, especially those which have influenced the development of the American system of government.

Prerequisite: a course in American history, and graduate standing.

53.605 Non-Western Political Theory (3)

Political theories and politically-related philosophical concepts of non-Western cultures; their influence on their own cultures and others.

Prerequisite: 53.600, or equivalent, and graduate standing.

75.621 Modern Totalitarian Systems (3), Joint: SIS (SGPA)

Prerequisite: graduate standing.

SEMINARS IN POLITICAL PHILOSOPHY

53.700 M.A. Research Seminar (3)

Prerequisite: permission.

53.705 General Seminars (3)

Prerequisite: permission.

53.706 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

These seminars in Political Theory will frequently be scheduled, from semester to semester, with differing special topics, such as "Emphasis on Contemporary Writers," "Contemporary Ideological Issues," etc.

RELATED COURSES AND SEMINARS

53.770-5 Seminars in Public Law

(When specialized in Jurisprudence)

COURSES RELATED TO 53.061 SCOPE AND METHOD IN POLITICAL SCIENCE

Not offered at this time as a comprehensive examination field option.

53.610 Scope and Method of Political Science Research I (3)

Review of the philosophical concepts, approaches, and methodologies of social science research, as applicable in political science. Evaluation of the respective approaches and methodologies. The problems of inter-disciplinary research. This, or equivalent, required in M.A. and Ph.D. programs in this School.

Prerequisite: 53.600, or equivalent, and graduate standing.

53.611 Scope and Method of Political Science Research II (3)

The creation of the political science research design. The applicable methodologies. Practice in their use. This and 53.610, or equivalents, required in the Ph.D. programs of this School.

Prerequisite: 53.610 or equivalent.

53.715 General Seminar in Political Science Research (3)

Prerequisite: Permission.

RELATED COURSES FROM THE SOCIOLOGY CURRICULUM

65.512 Quantitative Methods in Sociology (3)

65.612 Social Research Methods I (3)

65.613 Social Research Methods II (3)

65.712 Seminar in Social Research (3)

COURSES RELATED TO 53.062 SCIENCE, TECHNOLOGY, AND GOVERNMENT

53.620 Science and the State (3)

The interactions of science, scientists, and government, and their political, administrative, and social implications. Problems of public policy in scientific subjects. The roles and obligations of scientists toward and in public policy and administration. The politico-economic implications of governmental scientific research. The implications of science for the traditional state system and international order.

Prerequisite: Graduate standing.

55.513 Technology and Administration (3)

(See 55.61)

53.621 Contemporary Problems of Science Policy (3)

Current issues and special topics, variably of general scope or specialized focus.

Prerequisite: 53.620.

53.622 Cybernetics and Society (3)

The phenomenon of cybernation, in its most comprehensive totality, may be the most fundamentally significant social and philosophical problem of the next half-century. This course will consider the threats and promises in the widest array of dimensions: Automation and the labor force; the formidable implications of computer-amplification of the potentials of scientific research; Soviet concepts and achievements in the cybernation of bio-social research, social planning, and societal control; the international relations implications of such Soviet concepts; the issues for the U.S. citizen, the U.S. social scientist, and the U.S. government.

Prerequisite: Graduate standing.

SEMINARS IN SCIENCE, TECHNOLOGY, AND GOVERNMENT

53.720 M.A. Research Seminar (3)

Prerequisite: permission.

53.725 General Seminars (3)

Prerequisite: permission.

53.726 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

RELATED COURSES AND SEMINARS

65.549 The Sociology of Science (Sociology)

81.506-81.507 The History of Scientific Thought I & II

(From the Division of Natural Sciences)

53.673 The Politics and Economics of Research and Development

(See 55.67)

COURSES RELATED TO 53.063 COMPARATIVE GOVERNMENT AND 53.064 POLITICS AND ADMINISTRATION OF DEVELOPING COUNTRIES

53.630 Comparative Government I (3)

Comparison of constitutional foundations, governmental institutions, and political processes, with emphasis on the major democracies and the USSR.

Prerequisites: Graduate standing and 53.650.

53.631 Comparative Government II (3)

The application of empirical political theory to the comparative analyses of political systems. This course concentrates on one type of political system—constitutional democracy, using systems, functional, power and influence, and modernization theories to explore the conditions necessary for constitutional democracy. As part of a systems approach, consideration is given to the interaction between the democratic political system and its environment.

Prerequisite: 53.630, or equivalent, and graduate standing.

53.632 Government and Politics of Developing Nations (3)

The socio-political characteristics of the developing nations. Their similarities and differences in governmental structure and the dynamics of politics.

Prerequisite: 53.630, or equivalent, and graduate standing.

75.620 Seminar on World Communism (3) Joint: SIS (SGPA)

A survey of the development of socialist and communist movements, their background, organization, doctrine, and major strategic concepts; general

communist strategy toward the advanced industrial and underdeveloped areas.

Prerequisites: Modern history, Marxist Theory, and permission of instructor.

75.631 The Dynamics of Revolution (3) Joint: SGPA (SIS)

Backgrounds and causes of revolutions, and the assessment and prediction of revolutionary threat or potential. The types and stages of revolution, and the techniques of revolutionary action. The planning, organization, and conduct of revolution as a conflict instrument. The prevention and suppression of revolution.

Prerequisite: Graduate standing.

75.658 Seminar on Regional Organizations: Western Europe (3) Joint: SIS (SGPA)

A survey of the factors responsible for the trend toward European organization and integration, and an examination of the more important institutions of the European community: ECSA, EEC, WEU, Euratom, etc.

Prerequisites: Introduction to Economics or International Economics, Modern European History.

REGIONAL AND COUNTRY COURSES

related to the comprehensive examination fields 53.070-077 for non-SGPA students only.

53.540 Government and Politics of Western Europe (3)

53.541 Government and Politics of USSR-Eastern Europe (3)

53.542 Government and Politics of The Middle East (3)

53.543 Government and Politics of Africa (3)

53.544 Government and Politics of Communist China (3)

53.545 Government and Politics of Far East (excl. Communist China) (3)

53.546 Government and Politics of South Asia (3)

53.547 Government and Politics of Southeast Asia (3)

53.648 Government and Politics of Latin America (3)

SEMINARS

53.730 M.A. Research Seminar: Comparative Government (3)

Prerequisite: permission.

53.735 General Seminars: Comparative Government (3)

Prerequisite: permission.

53.736 Doctoral Dissertation Seminar: Comparative Government (3-12)

Prerequisite: permission.

53.740 M.A. Research Seminar: Developing Nations (3)

Prerequisite: permission.

53.745 General Seminars: Developing Nations (3)

Prerequisite: permission.

53.746 Doctoral Dissertation Seminar: Developing Nations (3-12)

Prerequisite: permission.

COURSES RELATED TO 53.065 THE AMERICAN GOVERNMENTAL SYSTEM

53.650 Graduate Survey of American Government (3)

This course approximates the six hours of the undergraduate courses 53.150 and 53.250. It is required of all SGPA graduate degree students who have not had an equivalent.

Prerequisite: Graduate standing.

53.651 The Legislative Process (3)

The function of the legislature in the American governmental system, with

emphasis on Congress and comparative consideration of the state legislature. Organization and procedures, relationships and interactions with the electorate, and the executive, judicial, administrative, and political establishments.

Prerequisites: 53.650, or equivalent, and graduate standing.

53.652 The National Executive (3)

The role and organization of the executive branch in the American governmental system, with emphasis on the presidency and comparative consideration of the office of governor. The functioning of the office as chief of state in its relationships with the legislative, political, administrative, and military establishments, and in the formation and control of foreign and defense policy.

Prerequisites: 53.650, or equivalent, and graduate standing.

53.653 American Federalism (3)

The constitutional and functional relations of American federalism. The interrelationships of national, state, and local governments. The concept of federalism in the governmental-economic and other dimensions of American life. The comparative consideration of the role and performance of the state in the American federal system.

Prerequisites: 53.650, or equivalent, and graduate standing.

53.654 The Formation of Public Policy (3)

An integrative study of the policy-making process. The roles and interrelationships of legislative, executive, political, and judicial institutions in the making of public policy. The relationships of persons, groups, and governmental and non-governmental institutions in the initiation, formulation, and implementation of public policy in the United States. The theory of political decision-making.

Prerequisites: Any two of the preceding three courses.

53.671 The Judicial System and Process (3)

(See field 53.067)

75.672 Foreign Policy Formation in the U.S. (3) Joint: SIS (SGPA)

The conduct and control of foreign policy—with special emphasis on administrative and policy problems of the United States and selected foreign countries; impact of foreign policy in the domestic and international field; State Department organization and its relation to other departments, Congress, the President, and public opinion. Members may select key problems showing the making and control in relation to strategic, military, fiscal, and economic practice.

Prerequisite: a course in American Government.

75.652 Seminar on National Security Policy (3-6) Joint: SIS (SGPA)

A broad examination of the principal elements of national security policy. The world setting. Roles of Executive Branch and Congress in policy making, implementation, and control. Civilian-military equation, military doctrine, strategic intelligence. Principal elements of military strategy. Operative economic factors and forces.

SEMINARS IN AMERICAN GOVERNMENTAL SYSTEM

53.750 M.A. Research Seminar (3)

Prerequisite: permission.

53.755 General Seminars (3)

Prerequisite: permission.

53.756 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

RELATED COURSES AND SEMINARS

All courses in fields 53.066, 53.067, 53.068, 53.069, and 54.060.

COURSES RELATED TO 53.066 POLITICAL DYNAMICS

53.660 Political Power Systems (3)

The concept of politics as power. Comparative study of political parties, groups, and mass movements in pluralistic societies. Theory, functions, structure, and tactics of each and their relation to social and governmental systems. Will require extensive familiarization with literature on public opinion, opinion groups, and parties. While differently oriented, this course equates undergraduate courses 53.351 and 53.451.

Prerequisites: 53.650, or equivalent, and graduate standing.

53.661 Political Behavior (3)

The theory and methodology of scientific study of politics and political behavior. Concepts of political man, power, influence, political socialization, social control systems. Contributions of economics, sociology, psychology, and other disciplines to the study of politics and political behavior. Impact and limitations of mathematics and science on political life and its study. The problems of descriptive theory and political values. Students will be expected to demonstrate proficiency in one or more techniques of behavioral research.

Prerequisites: 53.650 and 53.610. May be taken concurrently with 53.660.

53.662 Political Action (3)

The techniques and implications of political action. Varying sub-subjects: organization and manipulation of opinion, group organization and leadership, lobbying; party organizations, nominations, campaigning, voting; legislative and executive behavior and functions. Emphasis on environmental situations and the relation of political action to the political system. Field research projects.

Prerequisites: 53.660, 53.610 and 53.661 strongly recommended.

53.663 Political Functions (3)

Varying special sub-subjects: Political participation and socialization; political communication; representation and accountability; political leadership; decision making and policy formation.

Prerequisites: 53.660, 53.610 and 53.661 strongly recommended.

SEMINARS IN POLITICAL DYNAMICS

53.760 M.A. Research Seminar (3)

Prerequisite: permission.

53.765 General Seminars (3)

Prerequisite: permission.

53.766 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

COURSES RELATED TO 53.067 PUBLIC LAW AND THE LEGAL SYSTEM

53.670 Constitutional Law and the Supreme Court (3)

Judicial power and the judicial system. The Supreme Court as an institution. Constitutional doctrine and its implications for the political and legal system, with emphasis on federalism, powers and limitations on government, and the advancement of group and individual interests and rights. Contemporary role of the Supreme Court, its characteristics and problems.

Prerequisites: 53.650, or equivalent, and graduate standing.

53.671 The Judicial System and Process (3)

The nature of the judicial process and judicial decision-making. Organization, jurisdiction, administration, and comparison of federal and state court systems. Civil and criminal procedures. Functions and relationships of police, prosecutor, courts, and post-trial procedures in the administration of criminal justice.

Prerequisites: 53.650, or equivalent, and graduate standing.

53.672 Administrative Law and Process (3)

Legal foundations of the administrative process. Administrative discretion. Types of administrative action and enforcement. Rule making. Administrative adjudication. Organizational, procedural, and judicial controls on administrative discretion. Scope and nature of judicial review of administrative action. Consideration of both national and state practice.

Prerequisites: 53.650, or equivalent, and graduate standing.

SEMINARS IN PUBLIC LAW AND THE LEGAL SYSTEM

53.770 M.A. Research Seminar (3)

Prerequisite: permission.

53.775 General Seminars (3)

Prerequisite: permission.

53.776 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

As announced in semester schedules, these seminars may be offered variably as continuations in the general scope of this field, or as specializations in some aspect such as Legislative Drafting and Statutory Construction, Jurisprudence, the Law of Local Government, or some Contemporary Constitutional Problem.

COURSES RELATED TO 53.068 URBAN AFFAIRS

53.680 The Urban Polity (3)

The theory of local government. Comparative urban political systems. The relation of the total political system to the physical, social, economic, and administrative organization of cities, metropolitan areas, regions, and the megalopolis. Will require thorough familiarization with the literature of urban politics, urban administration, and urban development.

Prerequisites: 53.650, or equivalent, and graduate standing. Not open to students who have had 53.454 or equivalent.

53.681 Metropolitan Analysis (3)

An interdisciplinary course in the application of the approaches and methodologies of social science in the planning and analysis of urban affairs. Advanced reading in all disciplines. Creation of an interdisciplinary research design. The course is a search for the theory of the metropolis.

Prerequisites: 53.610 and 53.680.

53.682 Urban Politics (3)

Selected special emphases in various aspects of the politics of urban and metropolitan pluralism: Community and inter-community power systems; politics of core and suburb; politics of urban functions; political decision making, organization, participation, communication, leadership in the urban environment. Individual and team research.

Prerequisites: 53.680, or equivalent, and graduate standing.

53.683 Urban Administration (3)

Selected special emphases in the general and specialized functions of administrators in local, regional, state, and national public agencies dealing with urban affairs. The political, intergovernmental, fiscal, and developmental aspects of urban administration. Field research and case studies.

Prerequisites: 53.680, or 54.611, or equivalent, and graduate standing.

53.684 Urban Planning (3)

Selective special emphases in the politics and technical problems of urban planning: Comprehensive land planning, social and economic planning, transportation, renewal, rehabilitation and housing, open spaces, recreation, civic design, capital budgeting, zoning and other means of regulation and

execution of plans. Special emphasis on political and intergovernmental context of planning and development functions and decisions. Field research. Case studies. *Prerequisites:* 53.680, or equivalent, and graduate standing.

SEMINARS IN URBAN AFFAIRS

- 53.780 M.A. Research Seminars (3)**
Prerequisite: permission.
- 53.785 General Seminars (3)**
Prerequisite: permission.
- 53.786 Doctoral Dissertation Seminar (3-12)**
Prerequisite: permission.

RELATED COURSES AND SEMINARS

- 11.583 Real Estate Market Analysis (3)**
- 11.778 Seminar in Land Planning and Use (3) (SBA)**
- 53.690 Governmental Regulation and Planning in American Society (3)**
(See field 53.069)
- 54.600 The Administrative State (3)**
(See field 54.060)
- 54.610-1 Modern Public Management I and II (3, 3)**
(See field 54.061)
- 65.550 The City (3)**
(Sociology)

COURSES RELATED TO 53.069 GOVERNMENT AND THE SOCIAL ORDER

- 53.690 Governmental Regulation and Planning in American Society (3)**
Ideological and constitutional concepts of economic and social policy. Contemporary planning and regulatory policy and practice in the United States. Problems and consequences with respect to social and economic power, attitudes, class structure, social mobility, and group organization in American society. This course equates undergraduate courses 53.355 and 53.455. *Prerequisites:* 53.650, or equivalent, at least one basic course in economics, and graduate standing.
- 53.691 Government and the Social Order in Industrial Societies (3)**
A comparative survey of philosophies, concepts and processes of governmental planning and regulation of the social order. Totalitarian and democratic comparisons of method and effectiveness in directive, persuasive, and advisory planning. Problems and consequences with respect to social and economic power, attitudes, class structure, social mobility, and group organization of society.
Prerequisite: 53.690, or equivalent, at least one basic course in economics, and graduate standing.
- 53.692 Government and the Social Order in Developing Societies (3)**
A study of the role of government in rapid social and economic change, with principal reference to currently developing nations and with comparisons where appropriate to the developmental phase in presently industrialized societies. Philosophies, concepts, and processes of governmental participation in rapid change. Problems and consequences with respect to social and economic power, attitudes, class structure, social mobility, and group organization.
Prerequisites: 53.690, or equivalent, at least one basic course in economics, and graduate standing.

SEMINARS IN GOVERNMENT AND THE SOCIAL ORDER

- 53.790 M.A. Research Seminar (3)**
Prerequisite: permission.
- 53.795 General Seminars (3)**
Prerequisite: permission.
- 53.796 Doctoral Dissertation Seminar (3-12)**
Prerequisite: permission.

RELATED COURSES AND SEMINARS

- 65.542 Sociology of Political Action (3)**
(Sociology)
- 19.558 Comparative Economic Systems (3)**
(Economics)
- 19.761 Theory of Economic Development (3)**
(Economics)
- 10.500 Business-Government Relations (3)**
(SBA)
- 10.705 Seminar in Business-Government Relations (3)**
(SBA)

Public Administration and Management

COURSES RELATED TO 54.060 THE GOVERNMENTAL ADMINISTRATIVE ESTABLISHMENT

- 54.600 The Administrative State (3)**
The nature and significance of the administrative state as a major characteristic of modern government. The governmental administrative establishment—the bureaucracy—as a political, social and governmental institution, including sociological and psychological as well as political science perspectives. The interactions of the bureaucracy with social purpose and with other governmental functions and institutions. The theory and problems of administrative organization at the governmental level.
Prerequisite: 53.650, or equivalent, and graduate standing.
- 53.652 The National Executive (3)**
(See field 53.065)
- 54.601 The History of Administrative Institutions (3)**
An appreciation of the administrative systems of the ancient and pre-modern world. Comparative consideration of the origins and character of civil, military, church, and non-governmental institutions, and the history and development of the American administrative style. Introduction to the pioneers of modern management.
Prerequisite: graduate standing.
- 54.602 Comparative Public Administration (3)**
The managerial-administrative establishments of the major nations, as they compare with each other in conceptual foundations, structural characteristics, and functional performance. Particular emphasis on contemporary characteristics, and developments.
Prerequisite: 54.611 or 53.630.
- 54.603 Administration in International Organizations (3)**
The history and present character of administration in the international agency context. The varieties of international administrative agencies and their special requirements of organization, secretariat structure and operation, and adaptation of general management practices. The special problems

of communication, leadership, and interpersonal relations in the culturally mixed staff. Administrative-political relations in the international agency. Special emphasis on the League of Nations, historically, and the United Nations complex.

Prerequisite: 54.611 or 33.640.

53.683 Urban Administration (3)

(See field 53.068)

SEMINARS IN THE GOVERNMENTAL ADMINISTRATIVE ESTABLISHMENT

54.700 M.A. Research Seminar (3)

Prerequisite: permission.

54.705 General Seminars (3)

Prerequisite: permission.

54.706 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

RELATED COURSES AND SEMINARS

53.671 The Judicial System and Process (3)

(See field 53.067)

53.672 Administrative Law (3)

(See field 53.067)

COURSES RELATED TO 54.061 THE MANAGEMENT OF THE GOVERNMENTAL ADMINISTRATIVE ESTABLISHMENT

54.610 Modern Public Management I (3)

The development of management as a social function. The streams of past social, economic, political, and scientific thought which have merged in the theory and practice of modern management. The scientific management movement. The public administration movement. The modern management movement in business and government. Introduction to the basic principles of the organization, administrative direction, and operation of the complex managerial establishment in government.

Prerequisite: Graduate standing.

54.611 Modern Public Management II (3)

The perspectives, problems, and processes of the executive function of directing the managerial-administrative organization, including the major characteristics and roles of the spectrum of management sub-functions which it must depend on and integrate. Emphasis on the governmental context, but with appreciation of the similarities and contrasts with non-governmental management. The main lines of the behavioral and organizational theory of the managerial organization and the management function. (The different competence of diagnostic analysis and creative engineering of administrative structure and process is the burden of 54.613).

Prerequisite: 54.610.

54.612 The Behavioral Sciences in Public Management (3)

Psychological and social concepts and theories of the characteristics, attitudes, behaviors, and relationships of individuals and groups, with special application to administrative organization and relationships. The meaning and application of such concepts and theories in the manager's understanding of the behavior of his organization, in his interactions with subordinate executives and employees, and in his external executive, legislative, political, and public relations.

Prerequisite: 54.610.

54.613 The Analysis of Governmental Organization and Operation (3)

The evaluation and diagnosis of governmental administrative organization,

performance, and productivity. The design and installation of organizational and operational systems and procedures.

Prerequisite: 54.610.

54.614 The Staff Function in Government (3)

The function of senior governmental staff service. Military and civilian perspectives and concepts. The special problems of the staff executive. The mechanisms and systems of staff coordination and control. The directive instruments of administration.

Prerequisite: 54.611

53.672 Administrative Law (3)

(See field 53.067)

55.660 Management Information and Reporting Systems (3)

(See field 55.66).

SPECIALIZED COURSES

(not included in the comprehensive field pattern)

54.510 The Management of Institutional Records Systems (3)

The kinds and functions of institution paper and paperwork, with primary emphasis on the development and installation of a records management program. Physical facilities; systems and equipment for the storage of record and information paper; reproduction processes and equipment; mail; correspondence; telecommunications. (For comprehensive systems of automated information storage and processing, see courses under field 55.66).

Prerequisite: administrative experience, or undergraduate course work in government, public administration, or business administration.

54.511 Applied Administrative Management (3-9)

A special purpose course arranged for specially organized groups of foreign participants.

SEMINARS IN GOVERNMENTAL MANAGEMENT

54.710 MA-MPA Research Seminar (3)

Prerequisite: permission.

54.715 General Seminars (3)

Prerequisite: permission.

54.716 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

RELATED COURSES AND SEMINARS

55.511 The Systems Approach (3)

(See Center for Technology and Administration.)

55.512 Introduction to Cybernetics (3)

(See CTA)

55.513 Technology and Administration (3)

(See CTA)

55.540 Operations Research in Management (3)

(See CTA)

COURSES RELATED TO 54.064 GOVERNMENTAL FINANCIAL POLICY AND PROGRAM

54.640 Federal Fiscal Policy (3)

The fiscal significance and effect of the Federal budget. A consideration of the subjects of national income level, tax structure, and the large expenditure areas (e.g., national defense, foreign aid, agricultural support, veterans' benefits, the public debt) as they bear on the decisions and actions of Federal budget administrators.

Prerequisite: graduate standing and at least introductory economics.

54.641 Federal Financial Management and Comptrollership (3)

The financial functions of federal administration, including the roles and relationships of the central agencies, and the budget, accounting, and other financial functions of the financial administration of the individual department or agency. For the general manager who needs to know the contributions of financial management to his broader management responsibilities, and for the specializing executive or staff member who will be responsible for the financial function. This is not an accounting course.

Prerequisite: a course in public administration or experience in budgeting or financial administration, 53.650, and graduate standing.

54.642 Financial Administration in State and Local Government (3)

The fiscal significance and effect of state and local, governmental financial administration. The fiscal functions of budget, treasury management, accounting, and auditing, considered in the perspective of the administrator in state and local levels of American government.

Prerequisite: 54.610, 53.683, or one of the preceding courses in this field, plus 53.650 and graduate standing.

54.643 Governmental Program and Budget (3)

The processes and instruments of the planning, programming, and budgetary functions of the modern public managerial establishment, with special emphasis on the current approaches of the Federal Government in this function. A course to produce top managers and senior staff specialists who can design, use and integrate these functional systems for maximum managerial effectiveness in the making of decisions and the control of performance.

Prerequisite: a course in public administration or experience in budgeting, 53.650, and graduate standing.

54.644 Federal Budgetary Procedure (3)

The budgetary practice of the Federal Government, from the operating viewpoint. The budget cycle. Preparation and justification of estimates. Budget execution. Comparison of agency practices and techniques in budgeting.

Prerequisite: a course in public administration or experience in budgeting, 53.650 and graduate standing.

SEMINARS IN GOVERNMENTAL FINANCIAL POLICY AND PROGRAM

54.740 MA-MPA Research Seminar (3)

Prerequisite: permission.

54.745 General Seminars (3)

Prerequisite: permission.

54.746 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

RELATED COURSES AND SEMINARS

10.656 Planning—Programming—Budgeting (3)
(SBA)

19.541 Fiscal Theory and Planning (3)
(Economics)

COURSES RELATED TO 54.065 PUBLIC PERSONNEL ADMINISTRATION

54.650 Principles of Public Personnel Administration (3)

Personnel Administration as an integral aspect and function of management. Its relationships with other managerial and administrative functions and processes. The characteristics and procedures of the major personnel sub-functions: recruitment, selection, classification, evaluation, training, etc. The Federal civil service system will be the primary frame of reference, but with some generalizing and comparative extension to other variants of U.S. personnel administration system.

54.651 Manpower Utilization and Public Personnel Requirements Planning (3)

The problems of national and governmental manpower supply and demand. The comparative study of military and non-military policies and practices in the planning of the personnel requirements of the administrative agency. Comparison of governmental and non-governmental practice. The problems of creating supply to fulfill difficult demand: job redesign; training and re-training; centralization and services; incentives; etc.

54.652 Psychological Instruments and Methods in Public Personnel Administration (3)

As applicable in: Applicant appraisal, employee selection, placement, and evaluation; testing, rating, interviewing, and investigation; analysis of group relational and behavioral problems of efficiency, fatigue, accident experience, motivation, morale, etc.

54.653 Executive Selection and Appraisal in Government (3)

An intensive analysis of the problem of executive, as contrasted with other, personal selection and appraisal, with comprehensive consideration of the insufficiencies of current methods, of the requirements of the problem, and of the possibilities and methods for achieving significant improvement.

54.654 The Labor Relations of Public Employment (3)

Review of the rapidly changing patterns of relationships among public employers, employees, and organizations of public employees, and of their implications; the critical evaluation and design of policies, administrative concepts, and procedures for keeping pace with the dynamics of this field.

SEMINARS IN PUBLIC PERSONNEL ADMINISTRATION

54.750 MA-MPA Research Seminar (3)

Prerequisite: permission.

54.755 General Seminars (3)

Prerequisite: permission.

54.756 Doctoral Dissertation Seminar (3-12)

Prerequisite: permission.

COURSES RELATED TO ARCHIVAL ADMINISTRATION

Courses in this subject have been transferred to the Department of History. SGPA students may elect this subject as a comprehensive examination field, under the History Department field number, with the special approval of the Dean of SGPA.

COURSES RELATED TO 54.067 ONE SPECIALIZED STAFF OR LINE FUNCTION

Such AU or Consortium courses or independent study or research arrangements as are specifically relevant for the individual student.

SEMINARS

54.780 MA-MPA Research Seminar (3)

54.786 Doctoral Dissertation Seminar (3-12)

Special Courses and Internships.

SPECIAL COURSES AND INTERNSHIPS

Inter-College Programs

UNDERGRADUATE

56.410 56.411 56.412 The Washington Semester

See page 313, The Washington Semester, in the Undergraduate Political Science Program.

ADVANCED

56.610 The Washington Graduate Year: Cooperative Graduate Study Supervision

(Credit as determined by arrangements with formally cooperating institutions).

This is the offer of this School, to other colleges and universities throughout the United States who wish to enter mutually satisfactory arrangements for the purpose, to stand *in loco academic parentis* in the provision of academic counseling and guidance in course work for their graduate students who may need to carry on graduate study or dissertational research in Washington, D.C. This possibility must be limited to those students whose interests lie within one of the major curricular areas of this School, as described in the preceding pages of this catalog. We particularly invite the development of this possibility in the field of THE TECHNOLOGY OF MANAGEMENT in its public administration applications.

Comparative Government Workshops Abroad

ADVANCED

56.520 Summer Traveling Seminar (3-6)

Approximately 45-60 days.

56.521 In-Year Traveling Seminar (3-6)

One semester.

Field study of the governments of Europe or other areas of the World as announced, under the direction of a senior member of the faculty of this School. (Send for brochure).

Field Study Programs in American Government

ADVANCED

56.530 Public Affairs Laboratory (6)

Supervised field study of public affairs, in the areas of politics, governmental processes, or administration, through seminars and conferences with public officials and seminar integration by the directing School faculty member. Normally offered only in the Summer Session. For students of other institutions who are unable to participate in the in-year Washington Semester Program, this is an opportunity for closely similar experience in the summer period.

Prerequisites: Permission, after advisory consultation or correspondence.

56.691 In-Service Training Projects (3)

An opportunity, for a limited number of qualified persons, to receive credit for job-related study and research, under the joint supervision of the faculty of this School and officers of the agency of employment. Such agencies may be either governmental or private.

Prerequisite: Permission.

56.630 Graduate Internships in National, State, and Local Government, or in a Research Organization (6)

Arrangements for scheduled work assignments in government agencies and political organizations; participation, observation, and research, and seminar integration under the cooperative supervision of a government official or a research director and a member of the School faculty.

The Teaching of Politics and Government

56.740 Colloquium on the Teaching of Politics and Government (1)

A very informal association of groups of faculty members with those students who intend the college level of teaching as a career, to convey perspectives and experience, and to guide the participating students in systematic preparation.

Prerequisite: Graduate standing and permission.

Reading, Research and Tutorial

ADVANCED

56.590 Advanced Reading Project (3)

As arranged with advisor and supervising faculty member.

56.690 Graduate Research Project (3)

As arranged with advisor and supervising faculty member. For students who have been advanced to candidacy for the Master's or Ph.D. degrees, such a research project may be developed as a comprehensive case study in politics, government, administration, or the technology of management, for credit up to 6 hours.

56.695 Tutorial Seminar for Foreign Graduate Students (No Credit)

The vehicle for registration by foreign graduate students who require it for special assistance in their intercultural and academic problems. The cost of registration in this seminar will be determined on a special fee basis, ranging from \$200 to \$500 per semester depending on the extent and character of the assistance required.

56.797 Master's Thesis Seminar in Politics and Government, Public Administration or the Technology of Management (6)

56.799 Doctoral Dissertation Seminar in Politics and Government, Public Administration and Management, or the Technology of Management (6)

ADMINISTRATION

Dean	EARL H. DE LONG, PH.D.
Associate Dean	CHARLES H. GOODMAN, PH.D.
Assistant Dean for the Washington Semester	NATHANIEL S. PRESTON, PH.D.
Associate Dean for Graduate Studies	ROBERT E. CLEARY, PH.D.
Administrative Secretary	BO-PEEP LEE
Secretary for the Washington Program	MIREILLE F. BONHOMME
Secretary	LAURA L. CRITES
Secretary	SANDRA J. WALKER
Secretary	LYNDA L. DAVIES

FACULTY

Professors SEYMOUR W. BEARDSLEY (1963), B.A., Yale; M.A., Ph.D., Columbia (Joint: SIS-SGPA)

DANIEL M. BERMAN (1961), A.B., Rutgers; A.M., Wisconsin; Ph.D., Rutgers

RICHARD M. BRAY (1954), B.A., M.A., Colorado

FREDERICK S. BURIN, II (1961), B.S., College of the City of New York; M.A., Syracuse; Ph.D., Columbia

GEORGE P. BUSH (1948), M.B.A., Harvard; M.A., Ph.D., American (Emeritus Professor)

HAROLD E. DAVIS (1947), B.A., Hiram; M.A., Chicago; Ph.D., Western Reserve (University Professor) (Joint: SIS-SGPA)

EARL H. DE LONG (1963), B.S., M.A., Ph.D., Northwestern

CHESTER B. EARLE (1955), B.A., Ph.D., Texas

WILLIAM Y. ELLIOTT (1963), B.A., M.A., Vanderbilt; D.Phil., Oxford (University Professor) (Joint: SIS-SGPA)

CHARLES H. GOODMAN (1956), B.S., Wilson Teachers College; M.S., Ph.D., Pennsylvania State

ROBERT E. GOOSTREE (1953), B.A., Southwestern at Memphis; M.A., Ph.D., State University of Iowa; LL.B., American (Joint: WCL-SGPA)

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EDGAR S. ROBINSON (1953), B.A., Amherst; M.A., Ph.D., Columbia

HAROLD H. ROTH (1946), B.A., College of the City of New York; M.A., Columbia; M.A., Ph.D., LL.B., American

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- DENNIS D. DORIN (1967), B.A., Arizona State; M.A., Virginia
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- B. DOUGLAS HARMAN (1967), B.A., Nebraska Wesleyan; M.A., American
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JAMES T. SUTER, Assistant Chief, Research and Demonstration Branch, Division of Hospital and Medical Facilities, BSS, U.S. Public Health Service; A.B., M.A., George Washington

GRANT WRIGHT, Inspector, Commander, Services Division, U.S. Park Police; B.S., Virginia Union



SCHOOL OF INTERNATIONAL SERVICE

History The School of International Service opened in September 1958 as a companion to the School of Government and Public Administration. Its establishment was made possible by an initial gift of one million dollars from the General Conference of The Methodist Church in 1956. This marked the first fruits of an effort initiated by the University, under the leadership of President Hurst R. Anderson, together with various Protestant bodies to establish a school of foreign service. A second step toward the realization of this objective took place in 1960 with action by the United Presbyterian Church in the United States of America whereby this body joined in the School's policy formation and financial support. This has been followed by associations with the American Baptist Convention, the Episcopal Church, the Society of Friends, the Greek Orthodox Church, the Lutheran Church in America, the Presbyterian Church in the United States, the Southern Baptist Convention and the United Church of Christ.

In formulating curriculum and standards for the new school, assistance was sought from more than fifty outstanding educators, government officials and others outside of the University faculty. These individuals were formed into a series of specialized working committees. Broadly speaking, the recommendations of these committees became the academic program of the School. That similar strength might continue to undergird the School, an advisory council of outstanding scholars and practitioners in international affairs was established in 1962.

The School has witnessed a high rate of growth since its inception in 1958. The number of degrees conferred between June 1959 and June 1967 totaled 1,030, as follows: Bachelor of Arts—395; Master of International Service—29; Master of Arts (international relations and area studies)—515; Doctor of Philosophy—91.

Philosophy The School of International Service incorporates a distinct educational philosophy in its approach to the study and teaching of international relations as well as preparation for overseas service, but at the same time it rejects the concept of a "school solution" to problems. The School was founded on the belief that international relations is a body of subject matter with its own special attractiveness, coupled with its

own special difficulties, and that its mastery demands a special type of person. The School of International Service therefore endeavors to recruit, both as undergraduate and graduate students, persons marked by a number of distinct qualities. These may be summarized as follows: First, an understanding of and a commitment to the culture and civilization of the United States and familiarity with its history, its institutions, its achievements and its ideals.

Second, a curiosity about and a sympathetic understanding of cultural differences in the world and the capacity to accept and, if necessary, to live with such differences in serenity and tolerance.

Third, a capacity for the study of a foreign language with the aim of developing it into a useful tool of communication.

Fourth, a mature and stable personality capable of sustaining a person in a variety of complex and relativistic situations.

Whether the student is interested in an overseas career or in the academic study of international relations as an end in itself, it is important to note that the School conceives of itself as being firmly based on the liberal arts tradition and as offering a set of curricula that are "liberal" in the traditional educational sense. In no way is the School narrowly professionalized. It is a part of a large University and partakes of the classic values of higher education in America in every way.

Methodology The methodology of the School's program is fostered by a faculty which consists of individuals who have been interested in and professionally involved in international relations. Interaction between a faculty of varied background and highly motivated students encourages the fullest and freest inquiry and the exploration of all differences of interpretation, analysis and recommendation. The student finds himself compelled to develop maturity of judgment and the courage to reach his own conclusions. The School's program rests upon a strong preference for individual and creative student work in small groups rather than didactic exercises in either the accumulation of data or the memorization and repetition of "established" solutions to difficult problems.

The School's insistence on realism in the study of international relations is heavily reinforced by its location in the District of Columbia. Unmatched library facilities are of course available, as are other research media (including frequent contact with both American and foreign diplomatic personnel). The executive and legislative branches of the United States government have a long history of cooperation with students from The American University. Students come from many lands to the School, including a not inconsiderable number of foreign diplomats. The cultural exchange that takes place between American and non-American students is a valuable concomitant of study at the School.

UNIQUE ASPECTS OF THE SCHOOL

The Consortium of
Universities See page 33

Center for Diplomacy and Foreign Policy In 1961 the School opened a Center of Diplomacy and Foreign Policy, naming as its first Director, the Honorable Loy W. Henderson, Senior Career Ambassador of the Foreign Service and former Deputy Undersecretary of State for Administration. This was made possible by gifts from Senator William Benton, the New World Foundation, the Civic Education Foundation, and others.

Initial programs of the Center included a special training program for junior foreign service officers of other nations and several five-session lecture-seminars by outstanding personalities in the international scene. For additional information, write to the Office of the Dean, School of International Service, The American University, Washington, D.C. 20016.

Business Council for International Understanding Training Program In 1959 the Business Council for International Understanding selected the School as its instrument to provide additional preparation for business executives on international assignment. The purpose of this Program is to provide better understanding of cross-cultural differences; of the social, political and economic makeup of the country and area of first interest; and of techniques which will make them more effective representatives of their respective companies and better interpreters of the United States. There is also intensive foreign language study for those who wish it. To date classes have been given in fifteen languages. The facilities of the federal government, international organizations, and foreign embassies, all available in Washington, are utilized to provide private consultation for the participants. Over 100 companies have made use of the Program and over 800 of their executives and their wives have taken the entire course or part of it. Most of these are now serving in one of some 70 foreign countries.

The Director of the Program is Dr. Harold M. Randall, former career U.S. Foreign Service Officer. From 1955-1959 he was the U.S. representative to the Inter-American Economic and Social Council for the Organization of American States, with the personal rank of ambassador. For the year 1957-58, he served as the Council's chairman.

For additional Program information write to the Office of the Director, BCIU Program, School of International Service, The American University, Washington, D.C. 20016.

Institute on the United States in World Affairs This is a summer program offered under the auspices of the School of International Service. The first institute was held in 1945, and since that time, 1700 alumni have completed the Institute. The goals of the Institute are: (a) to study the processes of formulation and methods of implementation of U.S. foreign policy, (b) to analyze the principal issues involved in the position of the U.S. in world affairs, (c) to provide tools for more advanced theoretical study and a capacity to deal more competently with international relations. These goals are achieved through a combination of lectures, seminars, readings, and field trips. For additional information write to the Director, USWA, School of International Service, The American University, Washington, D.C. 20016.

Center for South and Southeast Asian Studies The Center for South and Southeast Asian Studies, established in 1965 in the School of International Service, administers a program of studies and sponsors research on the countries in south and southeast Asia. The major disciplines in the Social Sciences and Humanities, which form a systematic training program, are either represented in the Center faculty or are being developed with the participating departments and schools. Graduate degree programs may be taken within the disciplinary departments or within the School of International Service in area studies or in international relations and organization. Programs include a combination of disciplinary, area and language training. The School of International Service offers resources for comparative work in two or more major regions of Asia. The resources of American University in South and Southeast Asian Studies are supplemented by those of the Consortium of Washington Universities. Credit earned in the Consortium program (see page 33) will be considered residence credit.

The Director of the Center is Dr. Kenneth P. Landon, former International Relations Officer in Southeast Asian Affairs for the Department of State. For additional information write to the Office of the Director, Center for South and Southeast Asian Studies, School of International Service, The American University, Washington, D.C. 20016.

Study and Research in the District of Columbia The student of international affairs at The American University enjoys the opportunity of studying in the living educational laboratory of a world capital. The Congress, administrative agencies, and officials in Washington adopt a cooperative attitude toward faculty and students of The American University, who have many opportunities for field and laboratory work in the political and administrative sciences. The School's full-time teaching staff is supplemented by part-time instructors from government departments and agencies who are experts in both the theory and the practice of international relations.

SIS Coffee Hours A special feature of the School is its "coffee hour." Each week some outstanding person is invited to speak informally to students and faculty on a current vital issue. Guests from outside the faculty during 1966-67 included the following:

PEDRO SAN JUAN, Advisor to the President of the Inter-American Development Bank

VLADIMIR BOGACHEV, First Secretary, Press Dept., Soviet Embassy

BORIS SEDON, Second Secretary, Press Dept., Soviet Embassy

ALEXIA MAKAROV, Editor, Soviet Life, Soviet Embassy

AMBASSADOR SATTERTHWAIT, Former Asst. Secretary of State

THOMAS QUIMBY, Peace Corps Director, Africa

ALAIN RENS, Second Secretary, Belgium Embassy

DAVID POPPER, Deputy Assistant Secretary of State

JOHN BLANE, African Area Desk Officer, Department of State

DR. HAROLD JACOBSON, Director, Asian Communist Affairs, Department of State.

WILLIAM BADER, Professional Staff, Committee on Foreign Relations, United States Senate

UNDERGRADUATE STUDY

The undergraduate programs of the School of International Service are deeply rooted in the liberal arts tradition. All students, during the freshman and sophomore years, are exposed to general studies in the humanities, natural sciences and social sciences to provide them with a basic understanding of these areas of knowledge. Students will usually begin specialization in one of the professionally oriented options or in the general study of international politics during the second sophomore or first junior semester. All undergraduates receive the Bachelor of Arts degree upon completion of all University requirements and the requirements of one of the major programs offered by the School.

Admission to the School See also page 23

Requirements for admission are both qualitative and quantitative in nature. Candidates for admission to the School of International Service must present evidence of outstanding personal and academic qualifications. Eligibility for freshman admission requires (a) at least a "B" average in high school, (b) a rank in the top quarter of the high school graduating class, and (c) College Entrance Examination Board verbal and quantitative aptitude scores totalling at least 1150. (Write to the Director of Admissions of The American University for application information.)

Approximately 75 of those eligible are selected for the entering freshman class. Admissions criteria include academic preparation, character and leadership qualities, and personal interests.

The School welcomes early admissions requests from superior students whose scholastic performance and individual maturity ensure successful college work after three years of high school.

Transfer to the School is open to graduates of accredited junior colleges, students of other accredited colleges or universities, and students in other divisions of The American University after they have completed their freshman year. Applicants must have maintained a "B" average for the academic year preceding their transfer or possess a total cumulative "B" average. Subject matter deficiencies may require additional course work. Some adaptations are made in the School's required program to facilitate such transfers.

Advanced Placement and Advanced Standing Advanced standing credits may be earned either through the CCT Program offered by the University each summer for beginning freshmen, or through the advanced placement program of the College Entrance Examination Board. Students admitted to the School are encouraged to participate in the College Comprehensive Testing Program to earn credits in the humanities, natural sciences, mathematics, and social sciences. Credits earned through the College Comprehensive Testing Program may exempt students from an equivalent number of University and School requirements.

Academic Performance Students enrolled in the undergraduate programs of the School are expected to maintain the University minimum academic standard. Students whose academic average falls below this standard at any time must demonstrate adequate reasons why they should be continued in the School of International Service.

General Undergraduate Requirements

The general undergraduate requirements of the School have been designed to offer the undergraduate student a broad foundation in the liberal arts as well as particular preparation for the study of international relations. The basic School requirements are thus oriented to the general University requirements and to preparation for major specialization within the School.

Basic School and University Requirements The relationship between the School and University requirements (see page 28) is accomplished in the following manner:

I. Basic Studies

- A. English: 6 hours satisfied by Composition and Reading I, II or by Honors English I, II
- B. Physical Education: 4 units

II. Humanities: 12 hours

- A. Recommended: 6 hours Western Tradition
- B. Recommended: 6 hours American Studies
- C. Recommended: 3 hours Philosophy or Religion

III. Natural Sciences/Mathematics: 12 hours

IV. Social Sciences: 12 hours

- A. Recommended: 3-6 hours Economics
- B. Recommended: 3-6 hours Behavioral Sciences
- C. All School of International Service courses counted in the major will also apply to the University Social Sciences Requirement.

Foreign Language The foreign language requirement may be satisfied in one of the following ways: (a) two semesters of an intensive foreign language course at the elementary or intermediate level (12 credit hours); (b) four semesters of a non-intensive foreign language course (elementary and intermediate); (c) waiver examination. The Department of Languages and Linguistics of the College of Arts and Sciences evaluates the language proficiency of those students who claim a language waiver. If one of the course options indicated above is elected, the students must complete the requirement with a grade of "C" or better.

Graduate Record Examination Students are required to take the Aptitude Section of the Graduate Record Examination during their senior year. The examination is administered by the University Guidance and Testing Office during the fall semester. Students who desire to take other sections of the Graduate Record Examination must make their own arrangements with the Educational Testing Service, Princeton, New Jersey.

Major Programs

The study of international relations is the central component of all undergraduate major programs, yet the School recognizes a dual motivation in students who are concerned with world affairs. Many students are interested in the study of international relations as an academic discipline, while others wish to direct their undergraduate study toward a professional career in the international field. To accommodate the interests of both these groups, the School offers two undergraduate majors: the International Relations major, and the International Service major. Options available under the professional international service major include: Foreign Service, Overseas Business, International Christian Service, Overseas Representation, and Overseas and International Labor. Each of these options is designed to prepare the student for his chosen career objective. The international relations major offers academic concentration in the discipline of international relations. The requirements for each of the two majors are as follows:

International Relations MAJOR REQUIREMENTS (24 hours)

Introduction to World Politics I and II (33.200-201)

Contemporary International Politics (33.450) OR Foreign Policies of the Great Powers (33.302)

American Foreign Policy (33.430)

Theory of International Relations (33.467) (To be taken during the Senior year.)

Minimum of nine hours selected from the School's undergraduate international relations course offerings. NOTE: Senior Honors Seminar (33.492) may count toward the major.

ADDITIONAL REQUIREMENTS (3 hours in each of the following fields)

Diplomatic History

Comparative Government

Political Theory

ELECTIVE HOURS: Students are encouraged to develop secondary interests in the social sciences and humanities, developing the equivalent of a minor if they so wish. Electives should be selected carefully in consultation with advisers.

International Service All students who elect the international service major should take the following courses during their freshman and sophomore years so that they will contribute toward fulfillment of the basic School and University requirements. Students who do not take these courses during their first two years will be expected to complete them during their junior and senior years.

American Studies (6 hours)

Introduction to Economics I and II (19.100-101)

Introduction to World Politics I and II (33.200-201)

Modern Government (53.100)

United States Political System I (53.150)

All students who elect the international service major must select one of the following professional options and complete the courses indicated during their junior and senior years.

FOREIGN SERVICE

Basic Courses:

Problem Papers in American Diplomacy (33.563)

International Law (33.400) or International Organization (33.440)

Political Theory (One course concerning the theory or practice of Communism)

International Economics (19.311) OR Comparative Economic Systems (19.558)

Six hours elected from the following: American Foreign Policy (33.430), History of United States Foreign Policy (29.552-553), Foreign Policies of the Great Powers (33.302), Values and Objectives in Foreign Policy (33.519), World Political Geography (33.308), Overseas Labor (a course).

Seminars. Six hours selected from the following:

History & Theory of International Law (33.661)

Contemporary Problems of International Law (33.662)

Seminar on National Security Policy (75.652)

Integrated Area Seminar, to be taken in semester in which history or international relations is included.

OVERSEAS BUSINESS

Basic Courses:

Marketing I (11.300)

International Economics (19.311)

International Business (11.526)

Money and Banking (19.306) OR Economics of Public Finance (19.309)

American Foreign Policy (33.430) OR Contemporary International Politics (33.450)

Six hours elected from the following:

International Marketing Operations (11.528)

Multi-national Firm (11.626)

Economics Problems of an Area

Three hours elected from the following:

World Labor & Contemporary International Relations I or II (33.641-642)

Labor Economics (19.304)

History of the International Labor Movement (75.672)

INTERNATIONAL CHRISTIAN SERVICE:

Area Specialization:

Both the introductory and integrated area seminars are required from one of the following areas: Africa, Middle East and North Africa, Eastern Asia (Far East), South and Southeast Asia, Latin America, Western Europe. Students are also expected to take the cultural area analysis course related to the area.

Basic Courses:

Six hours elected from the following:

Introduction to the Old Testament (47.150)

Introduction to the New Testament (47.170)

History of Christian Thought I and II (47.370-371)

Comparative Religion (47.383)

Post-Biblical Judaism (47.394)

Ethics (47.310)

Courses are available at Wesley Theological Seminary to advanced students with special permission.

Required Courses:

World Human Needs I and II (33.543-544)

OVERSEAS REPRESENTATION:

Area Specialization (9-15 hours):

This requirement can be fulfilled by taking either integrated area seminars or courses or a combination of both in one of the following areas: Africa, Far East, Latin America, Middle East, South and Southeast Asia, Western Europe.

International Communications and Mass Media: (6 hours elected from the following):

Foundations of International Communication (75.639)

Psychological and Cultural Bases of International Politics (75.633)

International Political Communication (75.650)

Information & Persuasion in Cross Cultural Contacts (75.638)

News Reporting (17.320)

Feature Writing (17.325)

Mass Media in Society (17.503)

Public Relations Overseas (17.543)

Economics and Overseas Labor: (3 hours elected from the following):

International Economics (19.311)

World Labor & Contemporary International Relations I or II (33.641-642)

History of the International Labor Movement (75.672)

Social & Labor Problems of Underdeveloped Areas (75.675)

Foreign Policy and Political Theory : (6 hours elected from the following, including one course on the theory or practice of communism.)

History of United States Foreign Policy I or II (29.552-553)

Foreign Policies of the Great Powers (33.302)

American Foreign Policy (33.430)

Values and Objectives of Foreign Policy (33.519)

Political Theory (one course)

OVERSEAS AND INTERNATIONAL LABOR:

Basic Courses:

Labor Economics (19.304)

History of the United States Labor Movement (19.572)

Labor Statistics (19.575)

Foreign Policies of the Great Powers (33.302)

History of the International Labor Movement (75.672)

World Political Geography (33.308)

International and Overseas Labor:

Students must take nine hours of international labor courses in excess of those courses indicated above and must include one course of labor in an area within the nine hours.

GRADUATE STUDY

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult the Dean's office for the latest information.)

The School of International Service is committed to the ideal of superior scholarly achievement in its graduate study programs. The school expects that each graduate will enter upon his career in scholarship with such sound preparation and seriousness of purpose that both he and his field of academic interest will benefit. In this community of scholars and learners each student is encouraged to participate to his fullest in the action-reaction-interaction process, whereby the relationships and interests of faculty and students alike are significantly enhanced.

Admission to the School (See also pages 38 and 42)

Admission to graduate study in the School of International Service is restricted to students who have earned at least a "B" average in a relevant undergraduate major as well as a cumulative "B" average in all undergraduate work at an accredited institution. A relevant major is defined as a minimum of 24 hours in subjects appropriate to the degree or program selected. Other considerations include superior performance on the Graduate Record Examination and/or successful graduate study at another accredited institution. All applicants are required to take the Aptitude Section of the Graduate Record Examination. Students who fall short of the 24 hours of relevant undergraduate work will be expected to complete additional course work at The American University, to be determined at admission or upon selection of a major program.

Full-time graduate students, candidates for the Masters of Arts and Doctor of Philosophy degrees, and part-time students, otherwise qualified, will be admitted within the education capacity of the School. Applications for graduate studies must be submitted by February 1st for Summer and Fall admission and October 1st for spring admission.

Advancement to Candidacy Admission to a graduate program does not automatically mean advancement to candidacy for a graduate degree. Each is a separate step, and advancement is a discretionary act, following requirements established by the School.

M.A. DEGREE

At the time of advancement the student determines, in consultation with his program counselor, the fields he wants to offer for comprehensive examinations and any required tool of research and then files the appropriate form with the Dean of his School. Advancement to candidacy has *no connection with admission to the comprehensive examinations*. The candidate must apply for the latter [before the deadline dates—announced in the *Schedule of Classes Bulletin*] by filing the proper application form with his School Dean, and paying the required fee.

Master's degree students *may* apply for advancement to candidacy

when they have completed the first 12 hours of graduate work (with an average of "B" or better) and have made up all deficiencies specified by the School. This application *must* be made no later than the completion of 18 hours of graduate work. If at this time a student's average is less than "B", he will be dismissed from the University. He will also be dismissed if the grade average falls below the minimum requirement at any time thereafter.

Students may transfer up to 6 hours of work taken elsewhere provided the credits are relevant to the student's program and provided a "B" or better was earned for each course.

PH.D. DEGREE

The student determines, in consultation with his program counselor, the fields he wants to offer for comprehensive examinations and any required tool of research; he then files an application for advancement to candidacy with his Dean.

Doctoral degree students who have completed 30 hours of graduate work, including the Master's program if this degree has been secured, and at least 15 additional hours in residence at the University, *may* apply for advancement to candidacy if their grade average in all graduate work taken at the University is better than "B". Application *must* be made not later than the end of the semester in which 18 semester-hours of graduate work will have been completed in residence at the University, subsequent to admission to the doctoral program. If a student is ineligible for advancement at that time, his work at the University will be terminated. It will also be terminated if the grade average falls below the minimum requirement at any time thereafter.

If the Master's degree has been received at the University, a doctoral degree student *may* apply for advancement to candidacy after completing 12 graduate hours beyond the Master's degree but *must* apply no later than the end of the semester in which 18 semester hours of graduate work will have been completed beyond the Master's degree.

Transfer credit for prior work taken at other institutions is usually granted at the time of advancement to candidacy. In order to be transferred, the credits earned elsewhere must be graduate level courses in which a grade of "B" or better was earned, taken after the student received the Bachelor's degree, and they must be judged appropriate to the student's degree program.

Degree Programs

In the graduate programs, as in the undergraduate, the School recognizes that individuals have various motivations for pursuing the study of international relations. For those students who view the study of international relations as a scholastic discipline, the graduate program in international relations is most suitable. Students who are interested in mastering the elements of a geographical region and their interrelationships might select the area studies program specializing in Africa, Far East, Latin America, Middle East and North Africa, South and Southeast Asia, Soviet Union and Eastern Europe, or Western Europe. (Note: The School does not have a Doctor of Philosophy program in African or West European area studies.)

Others, interested in an international career, might enroll in the graduate level professional program. Options available under the professional program include: Foreign Service, Business Representation Overseas, International Christian Service, Overseas Representation Overseas and International Labor, Intelligence Research and Analysis.

Master of Arts in International Relations

Course Requirements Minimum of 30 hours of approved graduate work, three to six of which may be in the Master's Thesis Seminar: International Relations (33.797).

Language Requirement See page

Comprehensive Examinations Written comprehensive examinations in three approved fields. These examinations are taken when the student has completed all course work for the degree or the semester in which he is completing the course work. Students should contact the Office of the Dean for a complete list of comprehensive fields.

Research Requirement All candidates for this degree are required to write either a thesis credited from three to six semester hours within the 30 semester hours required for the degree, or two intensive research projects (non-thesis option) written in .600 or .700 level seminars, or two .690 Independent Research Projects. Students must apply for the non-thesis option in the Office of the Dean at the beginning of the semester in which the projects are to be written.

Doctor of Philosophy in International Relations

Course Requirements Minimum of 72 hours of graduate work, 12 of which may be in the dissertation seminar. A minimum of 18 semester hours must be in courses open only to graduate students (.600-.700 level). If the student's Master's degree required more than the usual 30 semester hours the Ph.D. course requirements are interpreted to mean 30 semester hours of course work beyond the Master's degree.

Language Requirement See Pages 370 and 371

Comprehensive Examinations Written comprehensive examinations in four fields are required as follows:

- a) Theories of International Relations;
- b) Either International Law Or International Organization;
- c) One of the following:

International Relations Analysis: The United States

International Relations Analysis: Western Europe

International Relations Analysis: Eastern Europe

International Relations Analysis: USSR

International Relations Analysis: Middle East & North Africa

International Relations Analysis: Africa

International Relations Analysis: Latin America
International Relations Analysis: Far East
International Relations Analysis: South and Southeast Asia

d) Fourth field to be selected in consultation with the student's adviser. Students should consult the Office of the Dean for a complete list of comprehensive fields.

Research Requirement All candidates for the Ph.D. degree in international relations are required to write a dissertation and defend it orally. The dissertation may be credited 12 hours in connection with the Doctoral Dissertation Seminar: International Relations (33.799).

Master of Arts in Area Studies

Course Requirements Minimum of 30 semester hours of approved graduate work, three to six of which may be in Master's Thesis Seminar: Area Studies (33.797).

Students enrolled in the South and Southeast Asian program must enroll in the seminar in South and Southeast Asia (33.686).

Language Requirement See pages 370 and 371

Comprehensive Examinations Written comprehensive examinations in three approved fields are required as follows:

a) a general comprehensive in the area (Successful completion of the final examination in the 12 hour integrated area seminar will be accepted in lieu of the area comprehensive examination for those students who have taken both semesters of the seminar and who are candidates for the area studies degree. To qualify for this exemption, the final examination in the seminar must have been taken within one calendar year of the date of the other comprehensive examinations.). It should be noted that there is no general area comprehensive in South and Southeast Asia. Students in this program are required to take the Cultural Area Analysis: South and Southeast Asia comprehensive examination.

b) a special field within the area (e.g., cultural area analysis, economics, government, history, international relations, literature or certain other fields by petition);

c) either a second special field within the area of an approved field from a discipline not specifically connected with the area of specialization.

Note: A special single comprehensive examination (two segments of four hours each) has been devised for Latin American and African area studies students who are enrolled in the respective integrated area seminars, successful completion of which will satisfy the comprehensive examination requirement for this degree. Students are urged to consult with the advisers for these two areas regarding the nature of and procedures for taking these special examinations.

These examinations are taken when the candidate has completed the course work for the degree or during the semester in which he is completing the course work.

Research Requirement All candidates for this degree are required to write either a thesis credited from three to six semester hours within the 30 semester hour required for the degree, or two intensive research projects (non-thesis option) written in .600 or .700 level courses or seminars, or two .690 Independent Research Projects. Students must apply for the non-thesis option in the Office of the Dean at the beginning of the semester in which the projects are to be written.

Doctor of Philosophy in Area Studies

Course Requirements Minimum of 72 hours of graduate work, twelve of which may be in the dissertation seminar. A minimum of 18 semester hours must be in courses open only to graduate students (.600 and .700 level). If the Master's degree required more than the usual 30 semester hours, the Ph.D. course requirements are interpreted to mean 30 semester hours of course work beyond the Master's degree.

Language Requirement See pages 370 and 371

Comprehensive Examinations Written comprehensive examinations in four approved fields are required as follows: A) a general comprehensive in the area; B) two approved special fields within the area. Fields approved are the following for a given area: international relations, history, economics, literature, government, culture area analysis. C) Fourth field to be selected in consultation with the Ph.D. adviser. Students are encouraged to select their fourth field outside their major area.

Research Requirement All candidates for the Ph.D. in area studies are required to write a dissertation and defend it orally. The dissertation may be credited twelve semester hours in connection with the Doctoral Dissertation Seminar: Area Studies (33.799).

Master of International Service

The degree of Master of International Service is conferred on those students who successfully complete the requirements of the graduate level professional international service program. Students who have already satisfactorily completed the School's requirements for the Bachelor of Arts degree in the program should be able to obtain the M.I.S. degree in one further academic year. Graduates of other colleges or universities must fulfill special requirements for the degree by petitioning for the acceptance of equivalent courses taken at other schools. If these courses are not approved as being equivalent, the student will take courses at The American University to satisfy these special requirements. Students who have not completed an undergraduate curriculum substantially similar to the requirements of the professional program will normally require one and one half years to obtain the degree.

Course Requirements All graduate students in the professional international service graduate program are expected to complete all courses listed under one of the following professional options unless such courses are offered at admis-

sion or satisfied by equivalent courses included in the undergraduate program.

FOREIGN SERVICE

Basic Courses

Problem Papers in American Diplomacy (33.563)

American Foreign Policy (33.430) OR History of U.S. Foreign Policy I, II (29.552-553)

Civilization of the United States (33.604), OR Interpreting American Civilization Abroad (33.605)

Political Theory (including treatment of theory or practice of communism)

Note: Students who do not offer a course in International Law or Organization at the time of admission will be expected to take international law or organization as part of the graduate program.

Seminars

Students in the 45 hour program will be required to take 12 hours of seminar work from available offerings, and those in the 30 hour program, 6 hours. Integrated seminars may be taken for 6 hours credit in the semester in which history or international relations is included. 45 hour program:

1) one approved 6 hour seminar plus either a second 6 hour seminar or two 3 hour seminars in related fields *or*

30 hour program:

1) one approved seminar (6 hours) or two 3 hour seminars in related fields.

OVERSEAS BUSINESS

Basic Courses:

Students must complete 24 hours of courses required in the undergraduate Overseas Business professional option unless previously taken or unless substitutes have been approved.

Advanced Courses:

Seminar in International Business (11.726)

Current International Economic Problems (19.752)

Comparative Labor Relations (19.574)

SEMINARS

One approved seminar (6 hours) or two 3 hour seminars in related fields.

INTERNATIONAL CHRISTIAN SERVICE

Area Specialization:

12 hours of integrated area seminars or comparable area courses related to one of the following: Africa, Middle East and North Africa, Eastern Asia (Far East), South and Southeast Asia, Latin America, Western Europe. Students are also expected to include the cultural area analysis course related to the area.

Courses:

World Human Needs I and II (33.543-544)

Other appropriate specialized courses may be selected from those listed

in the catalogs of The American University, other Consortium universities and Wesley Theological Seminary.

OVERSEAS REPRESENTATION

Seminar.

Civilization of the United States (33.604) or Seminar: Interpreting American Civilization Abroad (33.605)

Area Specialization (6-12 hours):

This requirement can be fulfilled by taking either integrated area seminars or courses or a combination of both in one of the following areas: Africa, Far East, Latin America, Middle East, South and Southeast Asia, Western Europe.

International Communication and Mass Media (6 hours elected from the following):

Psychological and Cultural Bases of International Politics (75.633)

Foundations of International Communication (75.639)

International Political Communication (75.650)

Information and Persuasion in Cross Cultural Contacts (75.638)

Mass Media in Society (17.503)

Public Relations Overseas (17.543)

News Reporting (17.320)

Feature Writing (17.325)

Economics and International Labor (3 hours elected from the following):

International Economics (19.311)

World Labor and Contemporary International Politics I or II (33.641-642)

History of the International Labor Movement (75.672)

Social and Labor Problems of Underdeveloped Areas (75.675)

Foreign Policy and Political Theory (6 hours elected from the following):

History of United States Foreign Policy I or II (29.552-553)

Foreign Policies of the Great Powers (33.302)

American Foreign Policy (33.430)

Contemporary International Politics (33.450)

Values and Objectives in Foreign Policy (33.519)

Political Thought of the Modern State (53.600)

Marxist and Non-Marxist Socialism (53.603)

OVERSEAS AND INTERNATIONAL LABOR

Basic Courses:

World Political Geography (33.308)

Political Thought of Modern State (53.600)

International Economics (19.311) OR Comparative Economic Systems (19.558)

Contemporary International Politics (33.450)

International Relations of an Area

Labor Courses:

Labor Statistics (19.575)

Labor in Western Europe (33.645)

History of the International Labor Movement (75.672)

World Labor and Contemporary International Relations I, II (33.641-.642)

History of the United States Labor Movement (19.572)

INTELLIGENCE, RESEARCH AND ANALYSIS

Area Specialization:

This requirement may be met by taking the twelve hour integrated area seminar (two semesters) or through single courses totaling 12 hours.

Courses and Seminars:

Seminar on National Security Policy (75.652)

Workshop in Intelligence Research and Analysis (33.679)

International Service students should consult with their adviser regarding the selection of elective courses to satisfy individual needs and to plan for comprehensive examinations.

Language Requirement See pages 370 and 371

Comprehensive Examinations All graduate students in the professional international service program must take three written comprehensive examinations. These examinations are taken when the student has completed the course work or the degree or during the semester in which he is completing the course work. The examinations required for *each* professional option are as follows:

FOREIGN SERVICE:

- a) One of the following: International Law or Organization, Contemporary International Relations, National Security Policy, International Economics;
- b) Either American Foreign Policy OR US Diplomatic History;
- c) An approved third field.

OVERSEAS BUSINESS:

- a) International Economics;
- b) Either International Labor Problems OR International Business;
- c) Area Comprehensive OR Area-related special field.

INTERNATIONAL CHRISTIAN SERVICE:

- a) An Area comprehensive;
- b) An approved field;
- c) One of the following: Cultural Analysis, Economics of Underdeveloped Areas, International Law, Theories of International Relations, International Relations of an area, Comparative Religion, World Christian Missions.

OVERSEAS REPRESENTATION:

- a) An Area comprehensive;
- b) One of the following: American Civilization, American Foreign Policy, United States Diplomatic History.
- c) One of the following: Cultural Area Analysis, International Communication, an approved field.

OVERSEAS AND INTERNATIONAL LABOR:

- a) International Labor Problems

- b) History of International Labor Movements
- c) Labor in an Area.

INTELLIGENCE RESEARCH AND ANALYSIS:

- a) An area comprehensive
- b) National Security Policy
- c) An approved field.

Research Requirement All candidates for this degree are required to write either a thesis credited from three to six hours within the hours required for the program or one intensive research project (non-thesis option) written in connection with .600 or .700 level courses or seminars or a .690 Independent Research Project. Students must apply for the non-thesis option in the Office of the Dean at the beginning of the semester in which the project is to be written. The non-thesis option paper will be reviewed by a committee of the faculty, which will certify it as qualitatively adequate.

Language Requirement Candidates for all Master's programs must pass a tool examination in one foreign language. Candidates for doctoral degrees must pass tool examinations in two foreign languages. The Ph.D. languages tool examinations may be somewhat more difficult in content and wording than the examination for the Master's degree, but the format of the examination is the same. The examinations consist of written translations or an oral examination or a combination of both, depending upon the degree pursued. The written examination consists of a translation into English of a foreign language text taken from the area of the student's specialization. Time allotted is one hour. The use of the dictionary is permitted. Before the Department of Languages and Linguistics can administer the tool examination, the candidate must fill out the "Approval of a Tool of Research" form and receive the approval of the Dean of the School for the language he has selected. Only those foreign languages may be selected for which an examiner is available. If the Department of Languages does not have a qualified examiner, the services of an outsider may be solicited.

Both Master's and Ph. D. candidates (except Ph. D. candidates in International Relations) who have a native or near native proficiency in the foreign language approved as a tool are exempt from the tool examination. Such exemption must be certified by the Department of Languages and Linguistics.

The language requirement for all Master's degrees will be considered met for candidates who have attained a "3-level" of proficiency in both speaking and reading, as certified by the Foreign Service Institute of the Department of State; the language requirement for Ph. D. candidates will be considered met for candidates who have attained a "4-level" proficiency in both speaking and reading in two foreign languages.

INTERNATIONAL RELATIONS: M.A. AND PH.D.

Candidates are required to take the written examination only. Doctoral candidates who have completed the second semester of a European language at the advanced level or the second semester of a non-European language at the intermediate level within the three years prior

to the date of advancement to candidacy with a grade of "B" or better at a recognized institution may be exempt from the tool examination. With special approval of the Dean of the School and the appropriate tool examiner, the results of tool examinations passed at other institutions within the three years prior to advancement to candidacy may be accepted as fulfillment of the tool requirement. Documents certifying such results must be submitted. Master's candidates who have completed the second semester of the intermediate level in a European language or the second semester of intensive elementary work in a non-European Language (at least 12 semester hours) within the two years prior to the date of advancement to candidacy with a grade of "B" or better at a recognized institution may be exempt from the tool examination. With special approval of the Dean of the School and the appropriate tool examiner, the results of tool examinations passed at other institutions within the two years prior to the date of advancement to candidacy may be accepted as fulfillment of the requirements. Documents certifying such results must be submitted.

AREA STUDIES: M.A. AND PH.D.

Master's degree candidates must pass an oral tool of research examination only. Ph. D. candidates must pass an oral and written examination in one language and a written examination in the second language. One foreign language should be a language which is spoken in the area; the other should be a language in which a considerable amount of literature concerning the area has been published.

Master's students in the South and Southeast Asian program must complete 12 hours of a non-European language of the area or present evidence of equivalent language competence.

INTERNATIONAL SERVICE: M.I.S.

Master of International Service degree candidates must pass a written and an oral examination. The oral interview is to ascertain that the candidate has mastered the phonological system of the language, that he can handle the structural framework and that he is in possession of a basic vocabulary. Results of tool examinations from other institutions (as explained in a preceding paragraph) may be accepted as total or partial fulfillment of this School's tool requirement. Acceptance as total fulfillment will depend especially on documentation of oral proficiency. Course work done at other institutions will warrant exemption from the tool examination only if audiolingual proficiency in addition to reading knowledge was attained and only if the content is comparable to course offerings at The American University.

SCHOLARSHIPS AND FELLOWSHIPS

Undergraduate Scholarships School of International Service students who are interested in securing financial assistance should write to the Director of Student Financial Aid of the University for the application procedures. The following awards are among those available to students pursuing an undergraduate degree in the School of International Service.

SOROPTIMIST FOUNDATION SCHOLARSHIPS: For students in the School

of Government and Public Administration and the School of International Service who plan a career in international affairs.

ALBERT PIKE AND COLONEL WILLIAM E. SCHOOLEY SCHOLARSHIPS: Tuitions scholarships for School of International Service students provided by the Scottish Rite Bodies in the Valley of Washington for the Southern Jurisdiction, U.S.A.

LEON M. ABBOTT SCHOLARSHIPS: For students in the School of International Service from funds provided by the Supreme Council, Thirty-Third Degree of the Ancient and Accepted Scottish Rite of Freemasonry for the Northern Jurisdiction, U.S.A.

THE DELONG SCHOLARSHIP: Preference given to School of International Service students.

R. M. DAVIS SCHOLARSHIPS: \$500 available to majors in the field of Political Science, with preference to students studying international relations.

GEORGE AND LOUISE CLARKE SCHOLARSHIP: One partial tuition scholarship given annually to an outstanding student with need.

Graduate Scholarships and Fellowships

Students who are interested in obtaining financial assistance should consult the section of this catalog on graduate scholarships and financial aid for the application procedures. Graduate awards are extended to applicants who have demonstrated scholastic excellence and who give promise of distinguished academic performance and future contributions in the study or practice of world affairs. Outstanding citizenship and character and sound educational objectives are considered as well.

The following awards are of special interest to students pursuing graduate degrees in the School of International Service.

Students are urged to consult the Director of Financial Aid for a complete list of those University awards for which SIS students are eligible.

ASSISTANTSHIPS IN INTERNATIONAL RELATIONS OR AREA STUDIES: Several of these are awarded annually. They provide the opportunity to earn up to \$650 a year toward tuition in work relevant to a student's academic program.

THE EPISCOPAL SCHOLARSHIPS: The Episcopal Church has established three scholarships of \$1000 each toward tuition for students enrolled in graduate programs in the School of International Service, and who contemplate a career in the international field.

FORD FOUNDATION FELLOWSHIP FOR FAR EASTERN STUDIES: \$2000 towards tuition and living expenses.

NATIONAL DEFENSE EDUCATION ACT (TITLE VI) AREA-LANGUAGE FELLOWSHIP: \$2000-\$2400 plus \$400 for each dependent and tuition remission for 12-15 hours each semester. Depending upon the allocation of awards by the U.S. Office of Education, for study of the areas and languages of the U.S.S.R. (Russian), Far East (Japanese and Chinese), South and Southeast Asia (Hindi and Indonesian), Africa (Hausa, Swahili, Uruba) and Latin America (Spanish).

SCHOLARSHIPS IN INTELLIGENCE RESEARCH AND ANALYSIS: \$1000 plus tuition for 12 to 15 hours per semester for students who plan to enter careers in intelligence research and analysis.

UNITED CHURCH OF CHRIST SCHOLARSHIPS IN AFRICAN STUDIES: \$1300 for students who wish to earn a Master's degree in African studies. Graduates of American Missionary Association Colleges will receive preference.

STUDENT ORGANIZATIONS AND AWARDS

Undergraduate Student Committee During the Fall semester of each year the undergraduate student body of the School elects a committee of two representatives from each class. The purpose of the committee is to work with the administration and faculty of the School to maintain close student-faculty relationships. The committee also assists in the coordination and implementation of the activities of the School, such as the annual school dinner, which is held in the Spring semester.

Graduate Student Committee This committee is composed of representatives of the School's graduate student body and functions essentially in the same manner as the Undergraduate Student Committee. The group provides valuable assistance to the administration and faculty of the School by promoting meaningful relationships between the faculty and graduate students.

Political Science Honorary Fraternity Beta Psi Chapter of Pi Sigma Alpha, national political science honorary fraternity, was chartered at The American University in 1955. Every student candidate must have completed at least 10 semester hours of work in government, public administration, political science and international relations, including at least one course not open to students in the first two years of collegiate work. The student must have maintained an average grade of "B" or higher in all the above-named courses, and, in addition, he must have maintained general scholarship sufficient to place him within the upper $\frac{1}{3}$ of his class. Pi Sigma Alpha sponsors public lectures in the field of government and public administration and other projects. It is an especially important organization for the graduate student of the School.

A.I.E.S.E.C. This international student organization, which takes its name from the initials of the description used by the French students who originated it, arranges the exchange of vacations and postgraduate short-term employment. This exchange enables students to participate in the life of other countries through actual jobs and to work their way for part of their expenses. An active chapter of A.I.E.S.E.C. is located at The American University. A.I.E.S.E.C. provides a valuable supplement to the academic programs in International Business in the School of Business Administration, in International Economics in the Economics Department of the College of Arts and Sciences, and to all the programs of the School of International Service. A.I.E.S.E.C. is not restricted, however, and all interested students are eligible and welcome to participate.

Pan-Ethnon Society The Pan-Ethnon Society is closely related to the School. Along with a committee of faculty wives, it serves as host for the regular Wednesday afternoon coffee hours. It also holds a number of other meetings with outside speakers and sponsors; it arranges embassy visits and other trips. Many students are active in similar related University organiza-

tions such as the French Club, German Club, Russian Club, and Spanish Club.

Awards Several annual awards have been established for which students in the School of International Service are eligible.

ALAN M. BRONNER MEMORIAL AWARD

This award was established in 1961 by friends and associates of the late Alan M. Bronner, one of the most outstanding and best loved students in the life of the School. The award is co-sponsored by the School of International Service and Pi Gamma Mu and is awarded for distinction in international cultural and political studies.

PITMAN B. POTTER MEDAL

This award medal was established in 1960 as a tribute to Dr. Pitman B. Potter, former Professor of International Law at The American University, who has distinguished himself widely as an outstanding and scholarly contributor to the study of International Law and Organization. The award is given each year to that student, undergraduate or graduate, who is distinguished for outstanding excellence in the field of International Law and Organization.

BENOY KUMAR SARKAR MEMORIAL PRIZE

In 1962, through the support of the Taraknath Das Foundation, The American University initiated an annual award to the student submitting a superior original work dealing with any aspect of the civilizations of South and Southeast Asia. Undergraduate or graduate students are eligible for the award after submitting, normally, a written essay, thesis, or dissertation on a subject involving new research and original thought relating to any discipline in the social sciences, humanities, fine arts or natural sciences.

FRANK WILLIS SCOTTON AWARD

This award is made annually to the student who is considered to be the most outstanding member of the graduating class of the School of International Service. The award commemorates Frank Willis Scotton who was killed in World War II in the service of his country and who is the father of a former student in the School of International Service.

FRESHMAN ESSAY PRIZES

Book prizes are awarded each year (three each semester) for the outstanding essays submitted in connection with the regular course work.

COURSES OF STUDY

The courses that follow are divided into the general categories which comprise the study of international relations and geographical areas in the School of International Service. The undergraduate curriculum of the School is listed as a separate category, with prerequisites indicated for each course. Graduate seminars at the .700 level all carry prerequisites for admission, usually 9-12 hours of relevant courses. Such seminars may be taken more than once for credit, provided that the seminar content is non-duplicating. Courses at the .600 and .700 level require a minimum of 9-12 hours of relevant courses as prerequisites, or taken simultaneously or permission of the instructor. Courses and seminars taught at the .600 and .700 level are limited to graduate stu-

dents who have been admitted to a degree program, and qualified seniors whose curriculum requires such courses. Non-degree students may not enroll in these courses. Courses at the .500 level require a minimum of six hours of relevant undergraduate courses as prerequisites, or permission of the instructor.

It is the policy of the School to schedule separate courses and seminars for graduates and undergraduates. The differentiation is one of level and depth rather than of substantive content. No student may receive credit for a graduate level course if the same course was taken at the undergraduate level for credit.

UNDERGRADUATE COURSES

33.100-101-102 American Civilization I-III (3,3,3)

American Civilization I and II serve as introductory courses to the government, economics, social structure, arts, religion and other aspects of the contemporary United States. American Civilization III is concerned with American ideas and ideals, considered in their historical development and in their relation to the thought of the Western world.

33.200 Introduction to World Politics I (3)

Concepts and Principles. A survey emphasizing the nature of interstate relations, factors influencing those relations, and the causes and consequences of international instability. Particular attention is paid to the sources and types of international conflict and to the techniques of conflict resolution.

33.201 Introduction to World Politics II (3)

Patterns of Development. *Prerequisite:* 33.200 Introduction to World Politics I. Study and relation of concepts of international politics discussed in 33.200 (e.g., balance of power, imperialism, international law, international organization) to select phases in the development of modern world politics.

33.302 Foreign Policies of the Great Powers (3)

Prerequisite: 33.220-201 Introduction to World Politics I and II. Comparative analysis of the historic evolution of the foreign policies of the major powers, with special emphasis on the period since World War II and on such issues as security, imperialism, international cooperation, international organization, and the impact of technology.

33.308 World Political Geography (3)

Prerequisite: 33.200 Introduction to World Politics I. Major political problems of the world related to geographic backgrounds. World problem areas, current issues, relationships of national states.

33.400 Introduction to International Law (3)

Prerequisites: 33.200-201—Introduction to World Politics I, II; 33.302—Foreign Policies of the Great Powers. Nature, sources and development of international law and its most important substantive elements. Emphasis on the place of international law in relation to other international studies.

33.403 American Civilization IV: Senior Seminar (3)

Topics vary. (May be taken more than once for credit if the content is non-duplicating.)

33.410 Introduction to the Middle East (3)

Prerequisite: 33.200—Introduction to World Politics I

33.412 Introduction to Russia (3)

Prerequisite: 33.200—Introduction to World Politics I

- 33.414 Introduction to Latin America (3)**
Prerequisite: 33.200—Introduction to World Politics I
- 33.415 Introduction to South Asia (3)**
Prerequisite: 33.200—Introduction to World Politics I
- 33.417 Introduction to Southeast Asia (3)**
Prerequisite: 33.200—Introduction to World Politics I
- 33.418 Introduction to the Far East (3)**
Prerequisite: 33.200—Introduction to World Politics I
- 33.420 International Relations of Western Europe (3)**
Prerequisite: 33.200 Introduction to World Politics I; 33.302—Foreign Policies of the Great Powers
- 33.422 Soviet Russia in World Affairs (3)**
Prerequisite: 33.200—Introduction to World Politics I; 33.412—Introduction to Russia
- 33.424 Introduction to Africa (3)**
Prerequisite: 33.200 Introduction to World Politics I
- 33.425 International Relations of the Middle East (3)**
Prerequisites: 33.200—Introduction to World Politics I; 33.410—Introduction to the Middle East
- 33.426 South Asia in World Politics (3)**
Prerequisites: 33.200—Introduction to World Politics I; 33.415—Introduction to South Asia.
- 33.427 International Relations of Southeast Asia (3)**
Prerequisites: 33.200 Introduction to World Politics I; 33.417 Introduction to Southeast Asia.
- 33.428 Far East in World Affairs (3)**
Prerequisites: 33.200 Introduction to World Politics I; 33.418—Introduction to the Far East.
- 33.429 International Relations of Latin America (3)**
Prerequisites: 33.200 Introduction to World Politics I; 33.414—Introduction to Latin America.
- 33.430 American Foreign Policy (3)**
Prerequisites: 33.200-201 Introduction to World Politics I, II; 33.302 Foreign Policies of the Great Powers.
 The development of the diplomatic process including the role of the President, and Department of State in foreign affairs. Significance of international institutions in American diplomacy.
- 33.432 International Relations of Eastern Europe (3)**
Prerequisites: 33.200 Introduction to World Politics I; 33.302 Foreign Policies of the Great Powers.
- 33.439 Foundations of International Communications (3)**
Prerequisite: 3 hours of psychology or equivalent or permission of instructor.
 The conceptions, problems, and techniques of international communication in terms of individual and group behavior as represented in social psychology and allied disciplines.
- 33.440 Introduction to International Organization (3)**
Prerequisites: 33.200-201 Introduction to World Politics I, II; 33.302 Foreign Policies of the Great Powers.
 A study of the organizational system of the international community: processes and institutionalized forms of international order.

33.450 Contemporary International Politics (3)

Prerequisites: 33.200-201 Introduction to World Politics I, II; 33.302 Foreign Policies of the Great Powers.

An examination and analysis of the course of international politics since the end of World War II. Topics covered include the Cold War, the non-western revolution, the industrial, technological and military revolutions, and the changing role of international organizations.

33.451 United Nations Organization and Functions (3)

Prerequisites: 33.200-201 Introduction to World Politics I, II; 33.302 Foreign Policies of the Great Powers.

The Charter, origins, functions, operation of the principal organs with emphasis upon the General Assembly and the Security Council, admission of members, obligation of membership.

33.467 Theory of International Relations (3)

Prerequisites: 33.200-201 Introduction to World Politics I, II; 33.302 Foreign Policies of the Great Powers.

A study of the various theories of international relations.

33.492 Senior Honors Seminar (6)

Selected topics. Participation by invitation of the faculty.

ADVANCED COURSES

THEORY

33.519 Values and Objectives in Foreign Policy (3)

Prerequisite: 6 relevant hours in either diplomatic history, ethics and/or international law. Role of ethical considerations in foreign policy. Meanings of national interest. Power, reason, and value as determinants.

33.668 Liberal Theories of World Politics (3)

A comparative analysis of the views on world politics of some twelve major liberal statesmen and philosophers of the 19th and 20th centuries. The focus will be on the light their doctrines cast on the problems of achieving a liberal world order.

75.569 Philosophic and Religious Aspects of World Relations (3)

Prerequisite: Introductory course in philosophy or political theory and a course in international relations. An inquiry into the philosophical and religious issues raised and presupposed by present day world conditions.

75.612 Seminar: Topics in Political Thought (3)

Intensive investigation of topics concerning concepts, movements, ideologies and significant theorists.

33.667 Theory of International Relations (3)

A study of the various theories of international relations.

33.710 Seminar in Theories of International Relations (3)

An examination and analysis of the various trends and theories of international relations.

International Law and Organization

33.600 Introduction to International Law (3)

Nature, sources, and development of international law and its most important substantive elements. Emphasis on the place of international law in relation to other international studies.

- 75.641 Seminar on International Administration (6)**
Prerequisite: At least one course in international organization or public administration, or permission. Nature and history of international administration, and its meaning within the study of international relations and organization. Theory and practice of functionalism. Secretariat structure and operation, with emphasis upon the League of Nations and the United Nations. Special problems of administration at the international level.
- 33.661 Seminar: History and Theory of International Law (6)**
Prerequisite: International Law and Organization. Development of international law from the earliest times. Leading theories of the sources, origin, and binding force of international law. Study and discussion of the classic publicists. Individual research projects.
- 33.662 Seminar: Contemporary Problems in International Law (6)**
Prerequisite: International law and/or organization. Study and discussion of such contemporary problems as: individual responsibility under international law; control of outer space; changing concepts of the territorial seas; relationship of international law and international organization. Individual research projects.
- 33.640 International Organization (3)**
 A study of the organizational system of the international community; processes and institutionalized forms of international order.
- 33.651 United Nations Organization and Functions (3)**
 The Charter, origins, functions, operation of the principal organs with emphasis upon the General Assembly and the Security Council. Admission of members, obligations of membership.
- 33.652 United Nations Economic and Social Operations (3)**
 A broad understanding of both the theoretical and practical aspects of the economic and social functions of the United Nations system, including the specialized agencies. Attention will be given to the political as well as economic and social forces that have shaped the system, the general pattern of activity in major substantive areas, including economic development, trade and social measures, problems concerning both national and international decision-making processes, and the likely future development of these programs.
- 33.654 Seminar: Organization of American States (3)**
 Organization and operation of the Organization of American States and affiliated organization. Inter-American security and peace system. Relationship of the system to the United Nations.
- 75.658 Seminar on Regional Organizations: Western Europe (3)**
Prerequisite: Introduction to Economics or International Economics, Modern European History. A survey of the factors responsible for the trend toward European organization and integration, and an examination of the more important institutions of the European community: ECSA, EEC, WEU, Euratom, etc.
- 33.663 Seminar: Law and Procedure of International Tribunals (3)**
 Ad hoc arbitral tribunals, the Permanent Court of Arbitration, mixed commissions, the Permanent Court of International Justice, the International Court of Justice, and international military tribunals.
- 33.675 Seminar on the United Nations (3-6)**
 Selected problems on the United Nations and specialized agencies.
- 33.750 Seminar in International Organization (3)**
 The nature of organization and administration at the international level, with special reference to existing international agencies. Individual research and written reports.

33.770 Seminar on International Law (3)

Prerequisite: 6 hours in international law and/or organization. Selected problems in international law including international, constitutional, administrative, and criminal law and international legislation.

Diplomacy and Foreign Policy Formation

33.512 Problems in Diplomacy (3)

Post-war difficulties, settlements, programs. Economic development and regional defense systems. Discussion of current trends in American foreign relations. Examination of selected international problems. Designed to provide a realistic insight into the stresses and demands of modern diplomacy. May be taken twice for credit.

33.563 Problem Papers in American Diplomacy (3)

Role playing course in American Diplomacy (adjustable to meet needs of foreign students). Each student is assigned the role of a desk officer for a country or group of countries or for an international organization or agency. The work consists of the preparation of typical State Department (Foreign Office) and foreign service documents, including briefing papers, position papers, political and economic reports, speech drafts, press statements, public affairs guidance, group reports, and national policy papers.

33.630 American Foreign Policy (3)

The development of the diplomatic process including the role of the President and Department of State in foreign affairs. Significance of international institutions in American diplomacy.

75.652 Seminar on National Security Policy (3-6) (Joint SGPA)

A broad examination of the principal elements of national security policy. The world setting. Roles of Executive Branch and Congress in policy making, implementation and control. Civilian-military equation, military doctrine, strategic intelligence. Principal elements of military strategy. Operative economic factors and forces.

33.655 The United States and International Organization (3)

The political science of U.S. participation in international organization. Background and consequences of expanded U.S. participation. Executive and Congressional roles in development and execution of U.S. international organization policies and activities. Examination of selected problem areas such as financing, international administration, economic and social development, politico-military action. Prospects and problems of development.

33.670-671 Seminar: Comparative Foreign Policy Formation I, II (3, 3)

The instruments and process of decision making in foreign policy of selected nations approached comparatively.

75.673 Seminar: Foreign Policy Formation in the United States (3)

Prerequisite: A course in American Government. The conduct and control of foreign policy, with special emphasis on administrative and policy problems of the United States and selected foreign countries due to the impact of foreign policy in the domestic and international field; on State Department organization and its relation to other departments. Congress, the President and public opinion. Members may select key problems showing the making and control in relation to strategic, military, fiscal and economic practice.

33.676 United States Policy Toward the Development of Nations (3)

33.679 Seminar and Workshop in Intelligence Research and Analysis (6)

Contemporary International Relations

- 33.616 International Relations Between the Wars (3)**
Diplomacy of 1919-1939 with particular reference to Europe. Development and breakdown of the French system; collective security, Fascism and Nazism, the Soviet Union, the role of the U.S. in European affairs.
- 33.617 Diplomacy of World War II (3)**
History of the diplomatic front during the War. Groundwork of the postwar settlement.
- 33.650 Contemporary International Politics (3)**
An examination and analysis of the course of international politics since the end of World War II. Topics covered include the Cold War, the non-western revolution, the industrial, technological, and military revolutions, and the changing role of international organization.
- 33.672 Seminar in Unconventional Warfare (3)**
An examination of modern unconventional war; its impact on the underdeveloped nations and on the conduct of United States foreign policy; political and ethical considerations.
- 75.610 Contemporary Ideological Issues (3)**
- 75.617 Conflict and Conflict Resolution (3)**
Comprehensive review of the social science of human conflict, with emphasis on politico-economic-military aspects, and the dynamics of conflict among nations. Review of contemporary research on disarmament, arms control, and the reduction and prevention of international conflict.
- 75.620 Seminar on World Communism (3)**
Prerequisites: Modern history, Marxist theory and permission of instructor.
A survey of the development of the socialist and communist movements, their background, organization, doctrine and major strategic concepts; general communist strategy toward the advanced industrial and underdeveloped areas.
- 75.631 The Dynamics of Revolution (3)**
The background and causes of revolution, and the assessment and prediction of revolutionary threat or potential. The types and stages of revolution, and the techniques of revolutionary action. The planning, organization, and conduct of revolution as a conflict instrument. The prevention and suppression of revolution.
- 33.673 Seminar in Unconventional Warfare (3)**
- 75.682 Seminar: The Role of Education in the Development of Nations (3)**
- 33.700 Seminar in Contemporary International Relations (3)**
Individual projects, group discussion and analysis of special problems; selected topics such as problems raised by nuclear warfare, political and military aspects of arms control, and the role of the military in developing nations may be examined as the focus of the semester's work. May be taken twice for credit.

International Political Communication

- 75.633 Psychological and Cultural Bases of International Politics (3)**
(Joint CAS)
Phenomena and problems of international politics in terms of underlying psychological and cultural forces; theory of international politics from behavioral-science points of view.

75.638 Information and Persuasion in Cross-Cultural Contacts (3)

Prerequisite: Foundations of International Communications and permission. A comparative examination of the theory and practice of effective international communication techniques as applied by government and non-government organizations and individuals.

75.639 Foundations of International Communication (3) (Joint SGPA)

The conceptions, problems, and techniques of international communication in terms of individual and group behavior as represented in social psychology and allied disciplines.

75.650 International Political Communication (3) (Joint SGPA)

Psychological aspects of foreign policy and role of communication. Problems presented by use of propaganda media of international communication in the service of national policy.

75.675 Political Communication and Foreign Policy: Systems of Support (3)

The course analyzes cultural, economic, and technical programs that governments use to create a favorable background for foreign policy aims. Conducted along workshop lines, one of the course objectives is to publish papers based on individual and group research.

International Labor

33.641-642 World Labor and Contemporary International Relations I, II (3, 3)

Evaluation of the influence of labor's new political and economic status on world affairs. Comparative labor ideologies and other labor issues in key areas of the world affecting international relations.

75.672 History of the International Labor Movement (3) (Joint CAS)

Development of international labor movement from mid-19th century to the present: origins, ideologies, aims, impact on world events, and structure of Socialist, Christian, Anarchist, Democratic, and Communist internationals.

75.676 Social and Labor Problems of Underdeveloped Areas (3)

Role of labor in new countries and dependent areas, labor's political orientation, contributions to the formation of new nations, relationship to new governments and attitudes toward new social and economic objectives; problems in recruiting leaderships and in applying trade unionism; labor's impact on the pattern and pace of industrialization.

33.677 Seminar in International Labor Relations (3-6)

Selected ideological, political, economic, and administrative problems in international labor relations. Special individual projects in key current issues.

American Civilization

33.543-544 World Human Needs I, II (3, 3)

33.604 Seminar: The Civilization of the United States (3)

A study, with papers and reports on significant 20th century writings, of major aspects of American Civilization.

33.605 Seminar: Interpreting American Civilization Abroad (3)

Readings in foreign images of the United States. Research papers on topics selected from American civilization in which non-Americans have evidenced other particular interest.

Area Studies

The introductory courses comprise surveys of the history, government, geography, culture, institutions and foreign relations of the area. The integrated area seminars, which may carry up to 6 hours credit each semester with varying emphasis as appropriate, treat organically (a)

the geography, demography, and ecology of the area, (b) social structure, (c) historical roots, (d) religion, (e) culture, (f) economy, (g) government and politics, (h) contemporary international politics, and (i) one or more studies of particular countries within the area. Opportunity is given in outside reading and research projects for the individual student to differentiate according to his own needs and interests, either on a subject matter basis or on a country basis.

Students taking the integrated area seminars may not obtain academic credit for overlapping courses in special aspects; if such courses have been taken, the integrated area seminar will carry correspondingly less credit. Full inquiry should be made prior to or at the time of registration.

All "700 level" area seminars ordinarily require as prerequisites either the relevant integrated area seminar or nine to twelve hours of course or seminar work in the field of the area. They may be taken twice for credit.

Students who are interested in area studies are urged to explore the offerings of other divisions of the University, such as the School of Government and Public Administration and Departments of Anthropology, Economics, English, History, and Sociology of the College of Arts and Sciences, for specialized courses in each of the geographical areas.

AFRICA

- 33.624 Problems of Contemporary Africa (3)
- 33.645 Labor in an Area: Africa South of the Sahara (3)
- 33.697-698 Seminar in Africa (6, 6)
- 33.785 Seminar on Africa (3)

FAR EAST

- 33.628 The Far East in World Affairs (3)
- 33.688-689 Seminar in the Far East (6, 6)
- 33.664 Ideological Aspects of Chinese Communism (3)
- 33.715 Seminar: Role of the Military in Modern China (3)
- 33.781 Seminar on China (3)
- 33.782 Seminar on Japan (3)
- 33.787 Seminar on Sino-Soviet Relations (3)

LATIN AMERICA

- 33.629 International Relations of Latin America (3)
- 33.645 Labor in an Area: Latin America (3)
- 33.684-685 Seminar in Latin America (6, 6)
- 33.653 Agrarian Problems: Latin America (3)
- 33.784 Seminar on Latin America (3)

MIDDLE EAST AND NORTH AFRICA

- 33.625 International Relations of the Middle East (3)
- 33.631 The Soviet Union in the Middle East (3)
- 33.645 Labor in an Area: Middle East and North Africa (3)
- 33.680-681 Seminar in Middle East (6, 6)

33.669 Nationalism in the Middle East (3)

The Middle East, where civilization originated, is now undergoing an ideological revolution profoundly affecting its traditional social, religious and political institutions. Nationalism is evolving and may have a profound effect on all international relations.

33.786 Seminar on the Middle East (3)

SOUTH AND SOUTHEAST ASIA

33.626 South Asia in World Politics (3)

33.627 International Relations of Southeast Asia (3)

33.645 Labor in an Area: South and East Asia (3)

33.686 Seminar in South and Southeast Asia (3)

33.653 Agrarian Problems: East and South Asia (3)

33.778 Seminar: Communist Political Warfare in Southeast Asia (3)

33.788 Seminar on South and Southeast Asia (3)

SOVIET UNION AND EASTERN EUROPE

33.622 Soviet Russia in World Affairs (3)

33.631 The Soviet Union in the Middle East (3)

33.632 International Relations of Eastern Europe (3)

33.682-683 Seminar in Soviet Union (6, 6)

33.721 Seminar in Soviet Foreign Policy (3)

33.783 Seminar on the Soviet Union (3)

33.787 Seminar in Sino-Soviet Relations (3)

33.789 Seminar on Eastern Europe (3)

WESTERN EUROPE

33.620 International Relations of Western Europe (3)

33.645 Labor in an Area: Western Europe (3)

33.693 Western Europe: Common Elements (6)

33.694 Western Europe: Germany as lead country (6)

33.695 Western Europe: Great Britain as lead country (6)

33.696 Western Europe: France as lead country (6)

THESIS AND DISSERTATION SEMINARS

33.797-A Master's Thesis Seminar: International Relations (3-6)

33.797-B Master's Thesis Seminar: Area Studies (3-6)

33.799-A Doctoral Dissertation Seminar: International Relations (3-6)

33.799-B Doctoral Dissertation Seminar: Area Studies (3-6)

FACULTY

Full-Time

Dean FREDERICK J. PIOTROW, B.A., Haverford College; B.A., M.A., D.Phil., Oxford. Associate Professor of Soviet Studies.

University Professors HAROLD E. DAVIS, B.A., Hiram; M.A., Chicago; Ph.D., Western Reserve. University Professor.

WILLIAM Y. ELLIOTT, B.A., M.A., Vanderbilt; Ph.D., Yale. University Professor.

RALPH H. GABRIEL, B.A., M.A., Ph.D., Yale. University Professor, Emeritus.

ERNEST S. GRIFFITH, A.B., Hamilton; D.Phil., Oxford. University Professor, Emeritus.

Professors ROLLIN S. ATWOOD, B.S., Chicago; M.A., Ph.D., Clark. Professor of Latin American Studies.

SEYMOUR W. BEARDSLEY, B.A., Yale; M.A., Ph.D., Columbia. Professor of International Communications.

MARY F. BRADSHAW, B.A., Pennsylvania College; M.A., Ph.D., Wisconsin. Professor of International Relations.

W. WENDALL CLELAND, B.A., Westminster; M.A., Princeton; Ph.D., Columbia. Professor of Middle East Studies, Emeritus.

LOY W. HENDERSON, A.B., LL.D., Northwestern; D. Public Service, Denver. Professor of International Relations; Director, Center for Diplomacy and Foreign Policy.

HARRY N. HOWARD, B.A., William Jewell College; M.A., Missouri; Ph.D., California. Professor of Middle East Studies.

WILLIAM R. HUTCHISON, B.A., Hamilton; B.A., M.A., Oxford; Ph.D., Yale. Professor of History and American Studies.

MARIAN D. IRISH, A.B., Barnard; M.A., Bryn Mawr; Ph.D., Yale. Charles C. Lerche Professor of International Relations.

PHILIP M. KAISER, B.A., Wisconsin; B.A., M.A., Oxford. Professor of International Labor Relations (On leave).

KENNETH P. LANDON, B.A., Wheaton; Th.B., Princeton; M.A., Ph.D., Chicago. Professor of Southeast Asian Studies; Director, Center for South and Southeast Asian Studies.

MICHAEL LINDSAY (Lord Lindsay of Birker), B.A., M.A., Oxford. Professor of Far East Studies.

OLIVER A. PETERSON, B.A., North Dakota. Visiting Professor of International Labor Relations.

PITMAN B. POTTER, B.A., M.A., Ph.D., Harvard. Professor of International Relations, Emeritus.

RALPH L. POWELL, B.A., California; Certif., California College in China; Ph.D., Harvard. Professor of Far East Studies.

DARRELL D. RANDALL, B.A., Nebraska Wesleyan; M.A., Nebraska, Columbia; Ph.D., Chicago. Professor of African Studies.

HAROLD M. RANDALL, B.A., Parsons; M.A., Ph.D., Georgetown. Professor of Latin American Studies; Director, BCIU Training Program.

ABDUL AZIZ SAID, B.S.S.S., M.A., Ph.D., American. Professor of International Relations; Director, Institute on the United States in World Affairs; chairman, International Relations Sub-Faculty, 1966-67.

DURWARD V. SANDIFER, B.A., Eureka; M.S., LL.B., Ph.D., Columbia. Professor of International Relations; chairman, Professional Programs Sub-Faculty, 1966-67.

SAMUEL L. SHARP, LL.M., J.S., Warsaw. Professor of International Relations.

ABSOLOM VILAKAZI, B.A., Natal; M.A., Hartford Seminary; M.A., Trinity; Ph.D., Natal. Professor of Anthropology and African Studies.

LAWRENCE W. WADSWORTH, JR., B.S., Centenary; M.A., Tulane; Ph.D., American. Grazier Professor of International Law.

MILLIDGE P. WALKER, A.B., Williams; M.A., Ph.D., California. Professor of Southeast Asian Studies; Chairman, Area Studies Sub-Faculty, 1966-67. Associate Dean.

TAKEHIKO YOSHIHASHI, B.A., California; M.A., Harvard; Ph.D., Yale. Professor of International Relations.

Associate Professors JOHN J. FINAN, B.A., M.A., Washington; Ph.D., Harvard. Associate Professor of Latin American Studies. (On leave 1967-68.)

GEORGE L. HARRIS, B.A., Washington; Ph.D., Catholic; Associate Professor of Far East Studies. (On leave, 1967-68.)

CHARLES H. HEIMSATH, B.A., Yale; M.I.A., Columbia; Ph.D., Yale. Associate Professor of South Asian Studies. (On leave 1967-68.)

WHITTLE JOHNSTON, B.A., Swarthmore; Ph.D., Harvard. Associate Professor of American Studies and International Relations.

CHARLES C. MCLAUGHLIN, B.A., Yale; M.A., Ph.D., Harvard. Associate Professor of American Studies. Chairman, School and University Requirements Sub-Faculty, 1966-67. (On leave 1967-68.)

ALBERT D. MOTT, B.A., M.A., Missouri; Ph.D., California. Associate Professor of West European Studies.

ELSPETH D. ROSTOW, B.A., Barnard; M.A., Radcliffe. Associate Professor of American Studies.

WILLIAM SPENCER, A.B., Princeton; A.M., Duke; Ph.D., American. Associate Professor of Non-Western Studies.

ALAN R. TAYLOR, B.A., Columbia; M.S., Ph.D., Georgetown. Associate Professor of International Relations.

Assistant Professors THEODORE A. COULOUMBIS, B.A., Connecticut; M.A., Georgetown, Connecticut; Ph.D., American. Assistant Professor of International Relations.

WILLIAM C. CROMWELL, B.A., Emory; M.A., American. Assistant Professor of International Relations.

JAMES R. JOSE, B.A., Mount Union; M.I.S., American. Assistant Professor of International Relations.

LUYSE KOLLNHOFFER, Ph.D., Vienna. Assistant Professor of South and South east Asian Studies.

HERMAN J. RUETHER, B.A., M.A., Xavier; Ph.D., Claremont. Assistant Professor South and Southeast Asian Studies.

CHONG YOON, B.A., Oregon; M.A., American. Assistant Professor of Far East Studies.

Instructors WILLIAM F. AHLSTROM, B.A., M.A., American. Instructor in International Relations; Assistant Dean.

PAUL O. JOHNSON, A.B., Bowdoin; M.A., Yale. Instructor in American Studies.

Part-Time

Adjunct Professors WILLIAM BADER, B.A., Pomona; M.A., Ph.D., Princeton. Adjunct Professor of International Relations.

FRANK BRANDENBURG, B.A., University of Chicago; M.A., Ph.D., Pennsylvania; Adjunct Professor of Latin American Studies. (Committee for Economic Development.)

F. GUNTHER EYCK, B.A., Alma College; M.A., Ph.D., New York University; M.S., Columbia. Adjunct Professor of International Relations.

LEON HERMAN, B.A., Long Island University; M.A., California. Adjunct Professor of Soviet Studies. (Specialist in Soviet Economics, Legislative Reference Service.)

HALFORD L. HOSKINS, B.A., Earlham; M.A., Ph.D., Pennsylvania. Adjunct Professor of Middle East Studies.

ERNEST W. LEFEVER, B.A., Elizabethtown; B.D., Ph.D., Yale. Adjunct Professor of International Relations. (Institute for Defense Analysis.)

WILLIAM A. LYBRAND, A.B., Muhlenberg College; M.S., Ph.D., Maryland. Adjunct Professor of International Relations.

BELA C. MADAY, Ph.D., Pazmany University. Adjunct Professor of East European Studies.

CARLTON SAVAGE, B.S., Oregon; M.A., George Washington. Adjunct Professor of International Relations.

A. BUEL TROWBRIDGE, B.A., Cornell; Diploma, Oxford; M.A., Union Theological Seminary. Adjunct Professor in Soviet Studies.

ERIC WILLENZ, B.A., M.A., New School for Social Research, New York; Ph.D., Georgetown. Adjunct Professor in Soviet Studies. (Senior Research Analyst, Bureau of Intelligence Research, Department of State.)

Professorial Lecturers JOHN T. BENNETT, B.A., Harvard; M.S., Ph.D., California. Professorial Lecturer.

JAMES E. CROSS, B.A., Yale; LL.B., Virginia. Professorial Lecturer in National Security Policy. (Research Associate, Institute for Defense Analysis.)

HOWARD C. REESE, B.A., M.A., Ph.D., New York University. Professorial Lecturer in International Communications.

JAMES SIMSARIAN, A.B., California; M.A., LL.B., Ph.D., Columbia. Professorial Lecturer.

HENRI SOKOLOVE, B.S., Pennsylvania; LL.B., George Washington. Professorial Lecturer in South and Southeast Asian Studies. (Consultant to Assistant Secretary for International Affairs, Department of Labor.)

JAMES H. SPINGARN, A.B., Dartmouth; LL.B., Columbia. Professorial Lecturer in International Relations (U.S. Arms Control and Disarmament Agency.)

CHARLES T. VETTER, A.B., Hamilton; LL.B., National University School of Law; LL.M., George Washington. Professorial Lecturer in International Communications. (Career Development Offices, U.S. Information Agency.)

Lecturers EARL BRILL, A.B., University of Pennsylvania; Th.B., Philadelphia Divinity School; Th.M., Princeton Theological Seminary. Lecturer in American Civilization.

NORDA CARLSON, B.A., Middlebury; M.A., American. Lecturer in International Politics.



THE COLLEGE OF CONTINUING EDUCATION

History The education of the adult part-time student has been a major concern of The American University throughout its history. Founded as a university devoted to graduate education, the University began its instructional program by offering work leading to advanced degrees in selected disciplines to persons engaged in career professions.

From these beginnings the University developed the School of Social Sciences and Public Affairs at its downtown Center. The SSPA was devoted to teaching and applying knowledge in the social sciences and related disciplines to the uses of government and society. In these areas it was concerned with both advanced and undergraduate study and its clientele was primarily the employed community of Washington.

As the University gradually developed its undergraduate degree program, this original tradition was perpetuated through the establishment of a Division of General and Special Studies, the purpose of which was to maintain the contact with the adult student and to continue to make the facilities of the University available to him.

Through the years adult education has become a big business, placing increasing and more complex demands upon the universities. In an effort to help meet this need, the Division of General and Special Studies was made a College of Continuing Education in October 1964.

Since that date, CCE has added two degrees and three certificate programs, and further programs are under consideration.

Philosophy As indicated by its name, the College of Continuing Education is dedicated to the continuing collegiate education of adults. Its primary purpose is the utilization of the intellectual resources of The American University in the service of the part-time student. The majority of students in this college are those whose major activity is something other than the pursuit of education. It is to the specialized needs of these students that the programs of the College of Continuing Education have been geared.

UNDERGRADUATE

Associate in General Studies

Social Science Option (60 Semester Hours)

- I. University Requirements (see page 28) (42 hours)
- II. Major Requirements (18 hours)
Six hours each in three of the following areas:
Economics, history, sociology, psychology, government, international relations.

Business Administration (60 Semester Hours)

- Option** I. University Requirements (see page 28) (42 hours)
- II. Major Requirements (18 hours)
10.306 & 10.307 Introductory Accounting I & II (6 hours)
19.100 & 19.101 Introduction to Economics I & II (6 hours)
10.201 Business Law I (3)
Mathematics or Statistics (3)

Police Administration (60 Semester Hours)

- Option** I. University Requirements (see page 28) (42 hours)
(As a part of the University Requirements students must take 57.200 General Psychology, 65.200 Introduction to Sociology, and 53.150 The U.S. Political System I).
- II. Area of Concentration (15 hours)
54.481 Introduction to Police Administration (3)
54.580 Principles of Police Administration (3)
54.581 Police Investigation (3)
54.584 Police Law and Evidence (3)
67.110 Public Speaking (3)
- III. Elective (3)
To be chosen from the following:
54.585 Criminalistics (3)
54.589 Civil Rights and Civil Liberties in Law Enforcement (3)
57.401 Psychology of the Adolescent (3)
57.410 Psychology for Law Enforcement Officers (3)
65.563 Causes of Crime (3)
65.568 Treatment of the Offender I (3)
65.569 Treatment of the Offender II (3)

Bachelor of Science in General Studies

The Bachelor of Science in General Studies degree is designed for undergraduate part-time students over the age of 21. For the convenience of the adult the course program has considerable flexibility, enabling the student to select one of three major areas of concentration: distributed social sciences, business administration, or police administration. Requirements have been structured in such a way that degree completion can be assured through evening classes.

Social Science Option (120 Semester Hours)

- I. University Requirements (see page 28) (42 hours)
- II. Area of Concentration (42 hours)
Six hours each in three of the following fields and a minimum of twelve hours on the 500 level in one social science.
Economics, history, psychology, anthropology, sociology, government, international relations.
- III. Electives (a minimum of 36 hours)

Business Administration (120 Semester Hours)

- Option** I. University Requirements (see page 28) (42 hours)
- II. Area of Concentration (42 hours)
Students concentrating in Business Administration should include 19.100 and 19.101 Introduction to Economics I & II (6) and six hours of mathematics as part of University Requirements. In addition, the following courses in business and related subjects are required:
 - 69.202 Basic Statistics (3)
 - 69.300 Business Statistics (3)
 - 10.306 Introductory Accounting I (3)
 - 10.307 Introductory Accounting II (3)
 - 10.201 Business Law I (3)
 - 10.302 Business Law II (3)
 - 10.465 Finance I (3)
 - 10.500 Business-Government Relations (3)
 - 10.481 Principles of Production (3)
 - 10.491 Personnel and Manpower Management in Industry (3)
 - 11.300 Marketing I (3)
 - 10.556 Business Budgeting and Executive Control (3)Six hours of electives in Business Administration.
- III. Electives (a minimum of 36 hours)

Police Administration (120 Semester Hours)

- Option** I. University Requirements (see page 28) (42 hours)
(As part of the University requirements students will take 57.200 General Psychology, 65.200 Introduction to Sociology and 53.150 The U.S. Political System I).
- II. Political Science (12 hours)
The following courses are required:
 - 53.250 The U.S. Political System II (3)
 - 53.354 Government and the Metropolis (3)
 - 53.350 U.S. Constitutional Law I (3)
 - 53.450 U.S. Constitutional Law II (3)
- III. Police Administration (21 hours)
 - 54.481 Introduction to Police Administration (3)
 - 54.580 Principles of Police Administration (3)
 - 54.581 Police Investigation (3)
 - 54.582 Traffic Planning, Regulation and Control (3)
 - 54.584 Police Law and Evidence (3)
 - 54.585 Criminalistics (3)

- 54.589 Civil Rights and Civil Liberties in Law Enforcement (3)
- IV. Related Courses (21 hours)
- 57.401 Psychology of the Adolescent (3)
- 57.410 Psychology for Law Enforcement Officers (3)
- 65.361 Social Disorganization (3)
- 65.563 Causes of Crime (3)
- 65.568 Treatment of the Offender I (3)
- 65.569 Treatment of the Offender II (3)
- 67.110 Public Speaking (3)
- V. Electives (24 hours)

GRADUATE

(Graduate requirements are in the process of being revised to meet the new graduate regulations approved by the University Senate in May, 1967. Students should consult the Dean's office for the latest information.)

Master of Science in Teaching

The Master of Science in Teaching is a professional degree designed to equip qualified candidates who are interested in the field of teaching. It is planned for full or part-time students who already have a bachelor's degree in a field of concentration other than education, and who are seeking a career or second career in teaching. In most cases the Graduate Record Examinations are not required for admission to the program.

In addition to the prerequisite courses or their equivalents, the program consists of a minimum of thirty graduate credit hours of professional training for teaching at the secondary level. A minimum of twelve graduate hours will usually be taken in the subject matter area in which the candidate expects to teach. The remainder of the credits will be taken in education as outlined under the curriculum. Since candidates are required to take six credits in a graduate research seminar, there is no thesis required. To complete the degree each student must pass two comprehensive examinations, one in the subject matter area and one in a core field of education.

The Master of Science in Teaching degree presently offers the following areas as disciplines: English, foreign language, science, mathematics, and United States history.

- I. Prerequisites
 - A. Psychology of Education
 - B. Methods of Teaching in Secondary Schools
 - C. Basic Statistics
- II. Foundations of Education (6 hours)
 - A. Historical and Philosophical basis for education.
(To be satisfied by one course in history of education and one course in philosophy of education).
 - 21.575 History of Education in American Culture (3)
 - or 21.500 History of Education in Western Culture (3)

- 21.501 Philosophy of Education (3)
or
- B. Psychological and Developmental Aspects of Classroom Teaching
(To be satisfied by the following courses)
21.520 Advanced Psychology of Education
21.527 Mental Health Aspects of Education
- III. Evaluation and Measurement in Education (3)
21.504 Evaluation of Student Progress (3)
(Prerequisite: 69.202 Basic Statistics or equivalent).
- IV. Graduate Research Seminar (6 hours)
21.795 Research Seminar in Education I (3)
21.796 Research Seminar in Education II (3)
- V. Practicum Area (6 hours)
To be satisfied by 21.691 In-Service Training: Internship in Education. (Prerequisite: one course in methods of teaching in secondary schools). At least 6 weeks (or the equivalent) of student teaching with a supervising teacher at the secondary level. Arrangements may be made to complete this requirement in evening high schools throughout the Washington Metropolitan area.
- VI. Subject Matter Area (12 hours)
The student must select a minimum of 12 credits in a major academic area at the advanced level.
A list of course offerings for each of the discipline areas is available upon request.

Master of Science in Correctional Administration

The Master of Science in Correctional Administration is a terminal professional degree designed to equip qualified candidates interested in various career areas of corrections for positions of leadership in this field. It is planned especially for those actually engaged in correctional work but is open to all qualified college graduates.

The MSCA program consists of a minimum of 35 credit hours of graduate work. Graduate courses include 14 credit hours in correctional administration plus 12 credit hours in the chosen field of government or sociology, plus 9 credit hours of supplementary courses. In addition, the candidate must pass two comprehensive examinations covering (1) the field of correctional administration, and (2) the field of either government or sociology.

Since candidates are required to complete both an in-service training project and a graduate research project, no thesis is required. These two courses must be completed with a grade of at least "B".

- I. Core Curriculum in Correctional Administration (14 hours)
 - 31.555 Institute of Correctional Administration (8)
 - Clinical Criminology I Case Studies
 - Clinical Criminology II Field Inspection Trips
 - Probation and Parole Seminars with Correctional Leaders
 - Counseling and Guidance of Offenders

- 56.691 In-Service Training Project (3)
Internship in a correctional agency for a minimum of 12 weeks under the joint supervision of University and agency officials.
- 56.690 Graduate Research Project (3)
A field study-operational project and report on a problem approved by the University.
- II. Minor Comprehensive Courses (A or B) (12 hours)
 - A. Government
 - 54.643 Government Program and Budget (3)
 - 53.650 Graduate Survey of American Government (3)
 - 54.610 Modern Public Management I (3)
 - 54.650 Principles of Public Personnel Administration (3)
 - B. Sociology
 - 65.510 Concepts of Sociology (3)
 - 65.540 Social Organization (3)
 - 65.563 Causes of Crime (3)
 - 65.569 Treatment of Offender II (3)
- III. Supplementary Courses (A or B and C) (9 hours)
 - A. Students with a minor in Sociology are required to take the following supplementary courses in Government:
 - 53.650 Graduate Survey of American Government (3)
 - 54.650 Principles of Public Personnel Administration (3)
 - B. Students with a minor in Government are required to take the following supplementary courses in Sociology:
 - 65.563 Causes of Crime (3)
 - 65.569 Treatment of Offender II (3)
 - C. All candidates for the MSCA degree are required to take the following supplementary course:
 - 53.671 The Judicial System and Process (3)
 - D. As an alternative to A or B, with the approval of the Dean of the College of Continuing Education, candidates may elect 6 credits from graduate courses in Counseling and Guidance or in Social Work with an appropriate university under the graduate consortium arrangement.

CERTIFICATE PROGRAMS

In recent years heavy demands have been placed upon the disciplines of business, data processing, and police administration. In the business field, accounting has played an increasing role in all aspects of management for both government and industry. Changes in technology have led to a special emphasis on the fields of data processing and law enforcement. To assist in the training for and professionalization of each of these areas, the College of Continuing Education has structured the certificate programs outlined below.

Admission to these programs is limited to those holding at least a high school diploma. For those under 21 not holding a Bachelor's degree, an admissions interview with a College of Continuing Education counselor is required.

Course requirements may be fulfilled either on-campus or at various off-campus centers in the metropolitan Washington area. Application blanks may be found attached to C.C.E. brochures for each of these programs.

Accounting Certificate

The certificate program in Accounting has been flexibly designed to equip the student for a variety of careers in accounting. Major emphasis has been laid on courses which will assist the candidate in qualifying for most state CPA examinations. Students who successfully complete the program may also consider careers in managerial accounting with private industry, all levels of government, or non-profit organizations such as trade associations and hospitals.

Students possessing undergraduate degrees take the 27 required credit hours, as set out below, plus 9 credit hours of electives most appropriate for his career goals.

Those students not possessing undergraduate degrees complete the same program as those with degrees, but must also take 6 hours of English Composition and Reading (23.100 and 23.101) and 3 hours of Mathematics (41.100).

The certificate, therefore, may be completed through 36 hours of course work for students already holding an undergraduate degree and 45 hours of course work for those not holding a degree. Up to 15 hours of comparable previous course work may be applied by transfer. Students may only transfer into the program grades of "C" or better. The student must maintain a "C" average to be awarded the certificate.

I. Required Courses (27 hours)

- 10.306 Introductory Accounting I (3)
- 10.307 Introductory Accounting II (3)
- 10.314 Intermediate Accounting (3)
- 10.411 Cost Accounting (3)
- 10.315 Advanced Accounting (3)
- 10.514 Accounting: Readings and Problems I (3)
- 10.431 Fundamentals of Income Tax (3)
- 10.201 Business Law I (3)
- 19.100 Introduction to Economics I (3)

II. Electives (9 hours)

- 19.101 Introduction to Economics II (3 hours)
- 10.302 Business Law II (3)
- 10.515 Accounting: Readings and Problems II (3)
- 10.532 Advanced Income Taxes (3)
- 10.421 Auditing (3)
- 10.465 Business Finance I (3)

Data Processing Systems

Students in the Data Processing Certificate program may gear such a program to careers in the field of public administration or the field of business. The certificate may be completed through 30 hours of course work distributed as described under the curriculum provided below. Up

to 12 hours of comparable previous course work may be applied by transfer. A minimum of 18 hours of this program must be taken in residence. Students may only transfer into the program grades of "C" or better. The student must maintain a "C" average to be awarded the certificate.

For Public Administration Students (3 hours)

54.310 Public Administration (3)

or 54.510 Management of Institutional Records Systems (3)

For Business Administration Students (3 hours)

10.481 Principles of Production (3)

or 10.491 Personnel and Manpower Management in Industry (3)

For All Students (24 hours)

41.110 Fundamentals of Mathematics I (3)

69.202 Basic Statistics (3)

or 69.400 Managerial Statistics (3)

10.306 Introductory Accounting I (3)

10.307 Introductory Accounting II (3)

55.410 Introduction to Data Processing (3)

55.530 Automatic Data Processing Systems (3)

55.561 Management of ADPS (3)

55.560 Systems Design for Business Operations (3)

Elective (to total to 30 hours)

55.511 The Systems Approach (3)

or 55.512 Introduction to Cybernetics (3)

or 55.533 Computer Programming (3)

Police Administration Certificate

The Police Administration Certificate program has been developed in cooperation with a group of area law enforcement agencies. At present, the Washington D.C. Metropolitan Police, the White House Police, the U.S. Park Police, Montgomery County Police, and the police departments of Arlington, Alexandria, and Fairfax, Virginia, are active participants in the program. The program is open to all law enforcement personnel, members of the armed service police, and other interested personnel. An Advisory Board made up of representatives of the local law enforcement agencies and the International Association of Chiefs of Police gives the program direction and guidance.

Courses for this program are set forth below. Other courses may be substituted for certain of the above with special approval of the Assistant Dean of C.C.E. Up to 12 hours of comparable previous course work may be applied by transfer. A minimum of 18 hours of this program must be taken in residence. Students may only transfer grades of "C" or better into the program. The student must maintain a "C" average to be awarded the Certificate.

I. Basic Courses (18 hours)

23.100 Composition and Reading I (3)

23.101 Composition and Reading II (3)

53.150 The U.S. Political System I (3)

54.481 Introduction to Police Administration (3)

- 57.200 General Psychology (3)
- 65.200 Introduction to Sociology (3)

II. Concentration Courses (12 hours)

Four courses to be selected in consultation with the program counselor.

- 54.580 Principles of Police Administration (required) (3)
- 54.581 Police Investigation (required) (3)
- 54.582 Traffic Planning, Regulation and Control (3)
- 54.585 Criminalistics (3)
- 54.589 Civil Rights and Civil Liberties in Law Enforcement (3)
- 57.401 Psychology of the Adolescent (3)
- 57.410 Psychology for Law Enforcement Officers (3)
- 65.563 Causes of Crime (3)
- 65.568 Treatment of the Offender I (3)
- 65.569 Treatment of the Offender II (3)

NON-DEGREE

A student who does not plan to enroll in a program leading to a degree at The American University may apply for admission to courses of his choice for which he has the necessary background and special qualifications. Through its non-degree program, the College of Continuing Education meets the needs of those not desiring to pursue a formal degree. This program makes it possible for students to register for courses which may provide personal enrichment or additional background for professional purposes. These courses can be audited or taken for credit. Application for admission is a part of the registration procedure and need not be made in advance, except as explained below.

Non-degree students must meet the following entrance requirements. They must be over 21 or hold a Bachelor's degree from an accredited college or university. Students who have attended another institution within the preceding calendar year must be in good academic standing and entitled to honorable dismissal. Students who have ever been dismissed from another University should seek a personal interview with a CCE counselor to determine eligibility to enter.

A student enrolled in good standing in another college or university who wishes to earn credit to be transferred to his home institution may be admitted to The American University as a non-degree student. Such students must consult the Assistant Dean for campus programs, College of Continuing Education.

A non-degree student usually may not enroll in more than nine credit hours of course work (or more than six credit hours if his courses are at the 500 level or above) in any fall or spring session. A student who is permitted, because of special circumstances, to enroll in 12 credit hours a session will be carried on the rolls as a full-time non-degree student and must pay the tuition and other fees charged to full-time undergraduate degree students. Such registrations are subject to approval by the Assistant Dean for campus programs of the College of Continuing Education. Non-degree students are held to the same academic standards as degree students and are subject to dismissal at the end of any session in which their cumulative grade point average falls below "C" (1.00).

Transfer From Non-Degree to Degree Status Students wishing to transfer from a non-degree status to a degree status at The American University should make application through the Office of Admissions. Those seeking to pursue an undergraduate degree may apply for admission to the fall session only. Application should be made after the student has finished twelve semester hours and before the student has completed thirty semester hours of work. Application for admission must be made before July 1 of the year in which admission is desired. A maximum of thirty hours of non-degree credits may be transferred to an undergraduate degree program.

Students seeking entry to a graduate program from non-degree status may apply during any semester. A maximum of twelve credit hours of graduate level course work may be transferred from non-degree to degree status.

FOREIGN STUDENTS

All new foreign students must apply to the Foreign Student Admissions Office in the Asbury Building for admission to the University programs. Once admissions eligibility is determined by that office, these students are urged to consult a C.C.E. counselor in order to determine an appropriate academic program. Because of the general difficulty in obtaining foreign transcripts, foreign students are urged to apply well in advance of the semester in which they wish to enter.

During registration new foreign students will have to obtain the signature of the Foreign Student Admissions Office in Asbury and the Foreign Student Adviser in Mary Graydon Center before seeing a C.C.E. counselor. Returning foreign students should report to the Foreign Student Adviser in Mary Graydon Center to initiate their registration.

COUNSELING

The College of Continuing Education maintains through its day and evening programs academic advisory services, giving special attention to each student's individual needs.

Students are encouraged to seek academic counseling at any time during the semester. A full-time staff of counselors is readily available on the campus from 9:00 a.m. to 5:00 p.m. Monday through Friday. For the benefit of the evening student, limited counseling is offered from 5:00 to 8:30 p.m. Monday through Thursday.

Particular emphasis is given in the areas of determining academic load, assisting in course selection, and in determining the overall academic standing of the student.

Students are referred to other departments of the University as the need arises. Those considering graduate programs in other departments of the University are urged to consult these departments in advance of registration.

When appropriate, students are referred to the professional services of the University Counseling and Testing Center for assistance in choosing vocational and educational objectives, assessing educational strengths and skills, and for help with problems of personal and social adjustment.

SUMMER SESSIONS

Students enrolling in the University summer sessions are subject to the same general admissions procedures as those described above for non-degree students. Students currently enrolled in another institution should apply via admissions forms available in the back of the summer school bulletin. This form certifies that the student is in good academic standing at his parent institution. Such letters should be sent directly to the Assistant Dean for Summer Sessions, College of Continuing Education. No formal application is necessary for those who qualify to enter a summer session. Admission can be completed at registration.

OFF-CAMPUS STUDY

The College of Continuing Education arranges for course offerings at selected off-campus locations in the Metropolitan Washington area.

Off-campus programs may include both graduate and undergraduate courses in all fields offered by the University except law and nursing. Credit earned in off-campus programs is applicable as resident credit toward the degrees offered by the University and comes under the same regulations and conditions as credit earned in courses meeting in University facilities on campus.

Although the scheduling of off-campus classes follows the general pattern of the University calendar and time schedule, it does not necessarily conform to the on-campus session dates in all details. The off-campus bulletin for each session should be consulted for further information.

OFFICE OF THE DEAN

<i>Dean</i>	RICHARD M. BRAY, B.A., M.A.
<i>Assistant Dean for Campus Programs and Counseling Evaluation</i>	EUGENE V. MORAN, B.A., M.A., ED. D.
<i>Assistant Dean for Summer Sessions</i>	HERBERT P. STUTTS, B.A., M.A.
<i>Assistant Dean for Off-Campus Programs</i>	WILLIAM F. LANIER, B.A., M.A.
<i>Resident Director, Fort Benning Branch</i>	JOHN B. EDGE, A.B., M.A.
<i>Director of Southern Centers</i>	BEN W. COVINGTON, B.A., B.S.
<i>Coordinator of Police Programs</i>	CHARLES HERMANEK, A.B., M.A.
<i>Academic Counselor</i>	NORDA D. CARLSON, B.A., M.A.
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<i>Secretary</i>	RACHAEL LOUISE BALDERSON

LUCY WEBB HAYES SCHOOL OF NURSING

Foreword There are more than 1,000 schools of nursing in America today, of which only 200 are collegiate schools offering both general courses in a variety of fields typical of baccalaureate programs as well as specialized nursing instruction. The established schools in this category represent a diversity of education offerings and philosophies, many of which have made unquestioned contributions to the education of nurses.

The American University Lucy Webb Hayes School of Nursing sets as its goal the reexamination and improvement of education in nursing by the development of a program which shall strive constantly for excellence.

Since education is a continuously changing process reflecting the richness of man's great intellectual inheritance as well as his constant reevaluation of old values and his search for new truths, the curriculum of the Lucy Webb Hayes School of Nursing both recognizes those traditional curricular characteristics in nursing education which have proved valid, and bears witness to awareness of the complex quality of intellectual change and experimentation in today's world.

Thus the curriculum retains those principles indispensable in the production of persons of both culture and expert specialized knowledge; in addition, departure from traditional practices and course contents will be encouraged in order to effect a dynamic educational climate which will stimulate the educational experience and will contribute to the advancement of the health and welfare of the community. Since education is also a process representing the universality of learning, it is planned that a program be effected which would bring to the campus representative students from all the countries of the world.

History While the University has long recognized the importance of nursing as a profession, it was the relocation of Sibley Hospital—for many years an established Methodist institution in Washington—on a site near the campus which led to a feasible and practical plan for the establishment of a baccalaureate program in nursing at The American University.

Establishment of this new school has been accelerated by close cooperation between the University and the Hospital, and through the interest and financial support of Methodist women's groups. Notable among these groups are the Woman's Society of Christian Service, both

nationally and in the Baltimore Conference, and the Woman's Guild of Sibley Memorial Hospital.

The School of Nursing also has the support of the Baltimore Conference of the Methodist Church which is now conducting a campaign to raise half a million dollars toward its endowment.

The School of Nursing which admitted the first class in 1965, received reasonable assurance of accreditation from the National League for Nursing in 1966.

Philosophy The comprehensive objective of The American University Lucy Webb Hayes School of Nursing is a dual one: education for the preparation of acceptance of (1) the obligations of citizenship in contemporary society; and (2) recognition of the responsibilities of nurses in the prevention of disease, the promotion of community and family health, and the care of patients in the hospital and home.

It is the belief of the school that such objectives can best be fulfilled by means of a general liberal arts education in combination with specialized curricular offerings. Hence the program is one which leads to the Bachelor of Arts.

SPECIFIC AIMS OF THE LUCY WEBB HAYES SCHOOL OF NURSING:

1. To provide students with knowledge of the major areas of learning, the natural sciences, the social sciences, and the humanities.
2. To assist students in the cultivation of skills and habits of reasoning which constitute intellectual competence, and the capacity to think logically and clearly.
3. To assist students to develop as responsible citizens, spiritually, socially, morally and professionally so that they may live intelligently and creatively in the complex contemporary world.
4. To inculcate in students the respect for learning and the need for the continuous search for knowledge; thus the recognition of the fact that undergraduate study is only the beginning of education.
5. To encourage creative abilities through emphasis upon philosophical theories and principles.
6. To prepare students for the responsibilities of the initial practice of professional nursing in any setting.
7. To prepare students for further study.

As the graduate of the basic baccalaureate program begins the practice of nursing, she is prepared:

- to administer care to the sick at the bedside.
- to apply the principles of disease prevention and health promotion which will enable the well person to remain well and prevent further disability among the ill and diseased.
- to analyze the needs of patients, establish plans for their care and assume responsibility for the execution of such plans.
- to improve the quality of patient care through critical appraisal of her practice, recommending appropriate revision as a result of evaluation.
- to work in collaboration with other members of the health professions for the purpose of the improvement of health care services to the individual and the community.

- to assume responsibility for continued professional growth.
- to pursue graduate study.

Facilities All campus facilities are available to students in the School of Nursing. In addition, Sibley Memorial Hospital, located approximately one mile from the University campus, will be the primary facility for clinical experience in the professional major. To supplement the Sibley Hospital relationship, arrangements are currently being made to utilize all possible clinical resources of the Washington community which will strengthen a clinical program designed to offer a most flexible and varied education to students in nursing.

Admission Requirements

Admission requirements are those established for undergraduates of the other academic programs of the University.

Students may apply for admission to the Fall semester only. Applications may be obtained by writing directly to the Office of Admissions.

A personal interview with a faculty member of the School, although not a requirement, is recommended prior to final acceptance of the applicant for admission.

High School Preparation Sixteen acceptable units of high school work are required for admission. The following units are recommended:

English 4	Foreign Language 2
Chemistry 1	Physics 1
Biology 1	History and Social Studies 2
Mathematics 2	

Transfer students from other accredited institutions will be given individual consideration. During the initial stages of development of the School, a program for graduates of Associate Degree and Diploma schools is not available.

Part-time study may be arranged for certain courses, but the time period in which clinical study in the professional major is offered (the sophomore through the senior years) requires, in general, that the student be in full-time residence.

It is recommended that no more than two years be devoted to part-time study; that is, students should plan to complete the program in nursing in a period of time not to exceed five years.

School of Nursing Scholarships

LUCY WEBB HAYES SCHOOL OF NURSING: available to selected students admitted to the School of Nursing. Tuition assistance is provided annually based on the recipient's academic performance and financial need.

THE LAURA RECKMAN MEMORIAL SCHOLARSHIP FUND: established by Alvina Reckman Myers in memory of and as a tribute to her late sister, Laura Reckman, B.S., University of Cincinnati, 1939, a Registered Nurse and a teacher of nurses, whose long and useful life was spent in unselfish service to others. Additional contributions have been made to

this Fund in Memory of Charlotte I. Tennery, wife of Dean B. J. Tennery of the Law School, herself a Registered professional nurse for many years. Mrs. Tennery died on May 20, 1967. The income of this Fund will provide annual tuition assistance to a needy and deserving female student in the Lucy Webb Hayes School of Nursing.

WOMAN'S GUILD OF SIBLEY MEMORIAL HOSPITAL: The Woman's Guild offers two scholarships of \$1,000 each to qualified freshman students entering the School of Nursing. The awards are renewable for the remaining three years of undergraduate study.

NURSING STUDENT LOANS: Under the Nurse Training Act of 1964, full-time students indicating a need for financial aid who are in good standing with the School are eligible to borrow up to \$1000 per academic year.

ARMY STUDENT NURSE PROGRAMS: Funds for tuition, fees and maintenance are available to students at the beginning of the Junior year for those who wish to participate in the program.

CURRICULAR PLAN

FRESHMAN YEAR

Fall Semester

- 10 General Chemistry I (4)
- 10 General Biology I (4)
- 100 Composition and Reading I (3)
- 200 General Psychology (3)
- 010 Freshman Orientation I (0)
(14 hours)

Spring Semester

- 111 General Chemistry II (4)
- 111 General Biology II (4)
- 101 Composition and Reading II (3)
- 200 Introduction to Sociology (3)
- 020 Freshman Orientation I (0)
(14 hours)

JUNIOR YEAR

Fall Semester

- 46.300 Nursing III (10)
- Philosophy Elective (3)
- Elective (Humanities) (3)
(16 hours)

Spring Semester

- 46.310 Maternal-Child Nursing (7)
- 46.330 International Health and Nursing (3)
- 3.201 Introduction to Cultural Anthropology (3)
Elective (Humanities) (3)
(16 hours)

Summer Session: 8 weeks

- 46.340 Psychiatric Nursing (4)
- 46.350 Rehabilitation Nursing (3)
(7 hours)

SOPHOMORE YEAR

Fall Semester

- 222 Human Anatomy and Physiology I (4)
- 202 Microbiology (4)
- 200 Nursing I (6)
- 030 Physical Education Activities (0)
(14 hours)

Spring Semester

- 223 Human Anatomy and Physiology II (4)
- 400 Child Psychology (3)
- 201 Nursing II (8)
- 030 Physical Education Activities (0)
(15 hours)

SENIOR YEAR

Fall Semester

- 46.400 Public Health Nursing (3)
- 46.410 Problem Analysis in Patient Care (3)
Elective (Humanities) (3)
Elective (3)
(12 hours)

Spring Semester

- 46.420 Organization of Patient Care Services (8)
- 46.430 History and Analysis of Nursing (3)
Elective (3)
(14 hours)

COURSES OF INSTRUCTION

46.200 Nursing I (6)

An introduction to the profession of nursing including the study of the health needs of individuals, families and communities; the assessment of nursing needs; and clinical practice in meeting the uncomplicated needs of selected patients. Four hours of lecture or seminar, eight hours of laboratory.

Prerequisite: successful completion of the courses of the freshman year of the program.

46.201 Nursing II (8)

Course content includes the body's reaction to illness and injury; care of the patient undergoing surgical treatment; care of the patient with a problem in nutrition; care of the patient with a problem in the regulation of the proliferation and maturation of cells. Five hours of lecture or seminar, twelve hours of laboratory.

Prerequisite: 46.200.

46.300 Nursing III (10)

Course content includes care of the patient with a problem in the maintenance of oxygen supply and the removal of carbon dioxide; in transporting materials to and from cells; in regulatory mechanisms; in motor and sensory functions; and in maintenance of fluid and electrolyte balance. Six hours of lecture or seminar, sixteen hours of laboratory.

Prerequisite: 46.200, 46.201. (Clinical laboratory in Nursing I, II, and III is scheduled in Sibley Memorial Hospital. In addition, selected experiences in homes and other settings where nursing is practiced are included.)

46.310 Maternal-Child Nursing (7)

Principles of growth and development related to the health of mothers, children and the family as a unit are emphasized. The student has experience in caring for mothers at various stages throughout the maternity cycle and for children from birth through adolescence. Three hours of lecture or seminar, sixteen hours of laboratory.

Prerequisite: 46.200, 46.201, 46.300.

46.330 International Health and Nursing (3)

This course presents the major international health problems in contemporary society and their relationship to nursing responsibilities. Three hours of lecture or seminar.

Prerequisite: 46.200, 46.201, 46.300.

46.340 Psychiatric Nursing (4)

Emphasis is placed on application of concepts related to psychiatric nursing previously studied throughout the curriculum. New knowledge and skills in psychiatric nursing are presented. Laboratory experiences include the care of patients in both the acute and chronic stages of mental illness. Three hours of lecture or seminar, twelve hours of laboratory.

Prerequisite: 46.200, 46.201, 46.300. (Clinical laboratory experience will be scheduled in Sibley Memorial Hospital and St. Elizabeths Hospital.)

46.350 Rehabilitation Nursing (3)

This course consists of a practicum in which rehabilitation concepts, included throughout the nursing major, are strengthened by the learning and application of special techniques of rehabilitation. The contribution of nursing to the rehabilitative process is emphasized. Sixteen hours of laboratory.

Prerequisite: 46.200, 46.201, 46.300.

46.400 Public Health Nursing (3)

Emphasis is placed on the application of public health principles included

throughout courses of the nursing major. Additional course content and experience with home-care services to patients and their families are provided. Three hours of lecture or seminar, twelve hours of laboratory each week for seven and one-half weeks.

Prerequisite: senior standing. (The clinical laboratory experience will be scheduled in both an official and a voluntary agency.)

46.410 Problem Analysis in Patient Care (3)

This course deals with problems presented by the acutely or chronically ill patient who has complex nursing needs. The student assumes increased responsibility for planning and administering nursing care to meet these needs. Three hours of lecture or seminar, twelve hours of laboratory each week for seven and one-half weeks.

Prerequisite: senior standing. (Clinical laboratory experience will be scheduled at Sibley Memorial Hospital.)

46.420 Organization of Patient Care Services (8)

Through participation in class and clinical laboratory, the student learns basic principles in the management and supervision of nursing care for groups of patients. Provision is made for utilizing these principles in working with both professional and auxiliary personnel. Three hours of lecture or seminar, twenty hours of laboratory.

Prerequisite: senior standing. (Clinical laboratory experience will be scheduled in a clinical area of the student's choice at Sibley Memorial Hospital.)

46.430 History and Analysis of Nursing (3)

This course traces the development of nursing from antiquity to the present day and considers the relationship of this development to problems in nursing organization and practice in contemporary society. Three hours of lecture or seminar.

Prerequisite: senior standing.

FACULTY

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N. MANCHESTER,
INDIANA

